Environmental Restoration of the Williamsen Property

Williamsen (Tesco) Property 1297 Highway 30 West Pocatello, Idaho

Prepared for

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Report on Environmental Restoration of the Williamsen Property

TABLE OF CONTENTS

1.	Introduction and Background Information1
2.	Williamsen Property Description
3.	Miscellaneous Environmental Cleanup Projects4
	Petroleum Underground Storage Tank Decommissioning4
	Abandoned Container Management and Building Cleanup5
	Septic Tank Assessment5
4.	Soil Remediation7
	Background and Previous Soil Investigation7
	Soil Characterization Sampling Activities8
	Soil Removal and Post Remediation Soil Sampling10
	Summary of Field Activities11
5.	Class V Shallow Injection Well (Dry Well) Closure Activities14
	Shallow Injection Well Design and Background Information14
	Shallow Injection Well Closure15
	LIST OF APPENDICES
4	
1	Figures
2	UST Closure Records
3	Container Management Information
4	Initial Characterization Figures and Soil Laboratory Results - August 2 - 3, 2000
5	Site Photographs
6	Soil Remediation Closure Sampling and Analysis Plan, Site Safety Plan
7	Remediation Closure Soil Laboratory Results - November 17, 2000
8	Remediation Closure Figure and Soil Laboratory Results - May 23, 2000
9	Remediation Closure Figures & Soil Laboratory Results-Aug., Sept., & Nov. 2001
10	2000 - 2001 Transport / Disposal Summary
11	Class V Injection Well Figures
12	Class V Injection Well Closure Laboratory Results and Chain of Custody
13	Septic Tank Assessment Report
14 15	Previous Contractor Reports
7 6	LIS BUT SITO DOCUMONIO

1. Introduction and Background Information

FMC purchased the Williamsen (Tesco) property in September of 1999. The site had been abandoned for several years. FMC never conducted any business operations at the Williamsen property, but performed environmental investigations and restoration after the 1999 purchase. This report describes the environmental investigations and environmental restoration work performed by FMC and contractors at the Williamsen (Tesco) property, including a detailed review of the contaminated soil remediation and the closure of a Class V Shallow Injection Well. Project tasks were conducted from February 2000 to August 2002.

The site history and previous owner / operator practices are not available to FMC. FMC did not commission any environmental site assessment reports prior to purchase but did receive copies of two previous assessments – a "Phase One Environmental Assessment Report" by EnviroSearch (November 1993) and a report entitled "Environmental Site Assessment – Phase II" by Reeve and Associates (August – September 1996) from the previous owner. These reports can be found in Appendix 14 to this report. Subsequent to FMC's purchase, Summit researched files at EPA and IDEQ. The most significant regulatory report pertaining to the Williamsen property was an "Inspection Report for AEI Corporation - Class V Injection Well Inventory - Pocatello, Idaho" prepared by Craig Paulsen (EPA – July, 1991), which can be found in Appendix 15.

The information available to FMC shows that Tesco American, Inc initially developed the Williamsen site as a truck repair and maintenance facility in the late 1970's. Figure 1 - Vicinity Map, shows the location of the Williamsen site. Around 1985 or 1986, Tesco American leased the site to Mr. Allan Elias and he operated businesses at the site under two names - Industrial Refining, Inc. and A.E.I. Corporation. The specific site leasing agreements with Mr. Allan Elias are unknown

to FMC. Mr. Elias' businesses reportedly recycled process byproducts from various local industries, including FMC, for metals extraction and fertilizer manufacturing.

A.E.I. filed for bankruptcy reorganization circa 1989.

FMC purchased the site in September of 1999 after the site had been abandoned for several years. The site was immediately secured through repairs to fencing, boarding up of broken windows; welding doors closed, and locking the perimeter gates.

FMC contracted with Summit Environmental, Inc. (Summit) and Envirocon to assist FMC with environmental investigation and restoration of Williamsen property. Work at the property was initiated in the Spring of 2000 and field work continued through November 2001. Environmental projects completed at the Williamsen site include:

- The decommissioning of two underground petroleum storage tanks;
- The characterization and management of over 50 abandoned material containers;
- The removal and disposal of 2 to 4 inches of pigeon dung, bird feathers, and debris in the warehouse building;
- The sampling and analysis of septic tank contents followed by chlorination of the tank contents;
- The characterization and remediation of cadmium-contaminated soil; and
- The closure of a Class V Shallow Injection Well.

The first three projects are summarized in Section 3 - Miscellaneous Environmental Cleanup Projects. Section 4 - Soil Remediation, summarizes the cadmium contaminated soil remediation actions, and Section 5 - Class V Shallow Injection Well Closure, provides the closure methodology and sampling data for the Class V shallow injection well. Appendices to this report contain numerous task reports, status memorandums, data summary tables and figures, and laboratory data.

2. Williamsen Property Description

The Williamsen property is located in the southwest corner of Section 12, Township 6 South, Range 33 East, Boise Base and Meridian. The site elevation is approximately 4,450 feet above mean sea level. The property is generally flat with a slight slope to the northwest. An irrigation canal, the Taghee Canal, borders the west side of the property and Interstate Highway 86 borders the north property boundary. High voltage power transmission lines (owned by others, with an easement) are located on the west side of the property. The general location of the property is shown in Appendix 1, Figure 1 - Vicinity Map.

Site features are shown in Appendix 1, Figure 2 – Site Drawing. The majority of the site is fenced with a 6-foot high wire cyclone fence with barbed wire top. A two-story concrete block building is located in the southern section of the property. The building is approximately 100 x 150 feet. A small air compressor room is attached at the northeast corner of the main building. The south section of the building was designed as office space and the north area was originally built as a truck maintenance shop and warehouse. The building was abandoned for many years and had numerous damaged areas and was inhabited by pigeons and feral cats. Many of the windows and doors were broken. The yard area around the building is paved and a concrete apron is located on the south, east, and west sides of the building.

A water supply well is located near the southeast corner of the yard area. The water well was made operational in 1996 as part of the Reeve's Phase II site assessment (see Appendix 14), however, the current condition is unknown. Figure 2 – Site Drawing, shows the approximate location of the facility supply well.

The north portion of the property was covered with grasses and weeds and had disturbed soil with evidence of being excavated and graded at various times.

Other site features include two truck ramps, an advertising billboard near the Interstate, an electrical transformer, a septic tank near the west fence line, and two underground fuel storage tanks. Section 3 – Miscellaneous Environmental Cleanup Projects, provides additional description of the facility septic system and the two petroleum USTs that were decommissioned through removal.

Prior to the soil remediation described in Section 4, precipitator dust was observed in the areas shown in Figure 2 – Site Drawing. Site photographs in Appendix 5 primarily show the FMC soil remediation work, however, site photographs prior to remediation are provided in the reports by EnviroSearch International, Reeve and Associates, and US EPA (see Appendices 14 and 15).

3. Miscellaneous Environmental Cleanup Projects

Petroleum Underground Storage Tank Decommissioning - In March of 2000, two abandoned petroleum underground storage tanks were decommissioned through removal. No UST petroleum releases were identified during the UST closure. The closure conformed to the State of Idaho and the U.S. EPA requirements for UST closure. An EPA representative was on-site during the closure activities and a final report was prepared and submitted to the EPA to document proper closure. Appendix 2 - UST Closure Records, contains the relevant UST decommissioning records.

The 35 gallons of recovered fuel was burned for energy recovery at Consolidated Fuel Oil in Englewood, Colorado. The water was treated for fuel recovery and then treated for hydrocarbon removal by Lewis Mechanical of Pocatello, Idaho. The

treated water was tested and then discharged to the City of Pocatello's waste water treatment plant under Lewis' waste water discharge permit.

Abandoned Container Management and Building Cleanup - A variety of containers were abandoned at the facility by the previous owners or tenants. Some containers were empty and others contained various amounts of unknown material or commercial product. Summit inventoried and sampled the containers in the Spring of 2000. Field screening and laboratory analysis of the contents was completed to allow for proper use, recycling or disposal of the materials. FMC then either used the materials, bulked them together (if similar) and containerized them for proper disposal, or repackaged and labeled them for storage by FMC. All warehouse containers were removed from the Williamsen site by approximately June of 2000. Appendix 3 - Container Management Information, contains summary information related to the sampling, MSDS reviews, and management of the containers. The data tables in Appendix 3 summarize the containers by like products or chemical constituents.

To complete the warehouse cleanup, FMC contracted with Envirocon, Inc. during the Summer of 2000 to remove 20 to 30 cubic yards of pigeon dung, bird feathers and debris from the warehouse building. The pigeon clean up debris was disposed of at FMC's industrial landfill.

Septic Tank Assessment

Septic System Description - Original construction drawings of the property show a septic system located on the west side of the site. The drawings were produced by Adamson Engineering and consist of three sheets, M-1 through M-3. Sheet M-1 is the Site Plan, Sheet M-2 is the Main Level Mechanical and Plumbing, and Sheet M-3 is the Upper Level Mechanical and Plumbing. Appendix 13 - Septic Tank Assessment and Wastewater Treatment Letter, contains the best available copies

of the site septic system design.

The mechanical and plumbing drawings show the locations of bathrooms, sinks and associated piping. These locations appear consistent with the observed physical layout of the building. However, during Summit's walk through inspection in the Winter of 2000, some modifications to the main level plumbing system were observed. The bathroom area and adjacent room contained what appeared to be a small mineral assay laboratory, including a stainless steel workbench and sink. The work area sink drain was plumbed into the main level wastewater plumbing. Some abandoned equipment and containers of materials were on the workbench. The remainder of the building wastewater piping from bathroom sinks and toilets appeared to drain to the septic system as originally designed.

According to the Site Plan drawing, the septic tank has a capacity of approximately 1500 gallons with the drain field located directly north of the tank. The septic tank and drain field are located approximately 140 feet west of the building.

Septic Tank Sampling and Analysis and the Addition of Chlorine - A representative sample of the septic tank waste was collected on August 2, 2000 (sample ID: ST-S). The objective of the sampling and analysis was to determine if the tank contents were RCRA hazardous waste due to the RCRA toxicity characteristic for metals. The sample was also analyzed for total and amenable cyanide because of the observed presence of what appeared to be a mineral assay laboratory.

Visual examination showed that the septic tank contents appeared to be consistent with black wastewater sewage. The sample was approximately 50% black-water and 50% black-sludge. A representative sample was placed in laboratory supplied containers, labeled, and stored in a cooler with blue ice. The sample was submitted to Analytical Laboratories of Boise, Idaho for RCRA TCLP metals, total cyanide, and

amenable cyanide analyses. EPA Standard Methods 335.2 and 335.1 were used for the total and amenable cyanide analysis, respectively.

The laboratory results indicated that the septic tank contents were not RCRA hazardous waste due to metals toxicity. The results showed 57.1 mg/kg total cyanide and 1.6 mg/kg amenable cyanide. FMC contracted with Envirocon to add concentrated chlorine material (swimming pool disinfectant) to the septic tank during the Winter of 2000.

Predisposal Sampling and Analysis - Summit re-sampled the septic tank contents for total cyanide and amenable cyanide on May 23, 2001 (sample ID: ST-Will). A bacteria sample was collected on August 8, 2001 (sample ID: William - SEP). The cyanide sample was submitted to AlChem Laboratories of Boise, Idaho, and the bacteria sample was submitted to IAS - Enviro Chem of Pocatello, Idaho. The 2001 results show the total cyanide concentration to be 0.11 mg/L; the amenable cyanide was below the laboratory detection limit at <0.005 mg/L; and total coliform were absent at <2 counts. Appendix 13 - Septic Tank Assessment contains a summary letter report and the laboratory reports relevant to the septic tank characterization and sanitation project.

4. Soil Remediation

Background and Previous Soil Investigation

Industrial Refining Inc. and/or AEI Corporation (owned by Mr. Alan Elias) operated a precious metal recovery and fertilizer manufacturing facility on the Williamsen site from approximately 1985 to 1992. Process byproducts from several local industries were utilized as feedstock. FMC precipitator dust (also termed "treater dust" in some earlier reports) was one of the materials used as a feedstock at the Williamsen site. The precipitator dust generated at FMC in the 1980's contained

elevated levels of several heavy metals and FMC data showed that the material would occasionally exceed the TCLP limit for cadmium toxicity. Mr. Elias' business ventures are known to have abandoned some pre- and post-process material on the Williamsen property. Appendix 1 Figure 2 -Site Drawing, shows the approximate site areas where precipitator dust was visible. Appendix 14 includes the 1996 "Environmental Site Assessment – Phase II" report by Reeve and Associates where several site areas were sampled to determine metal and cyanide concentrations. Cadmium levels were found to be elevated north of the paved yard area.

Soil Characterization Sampling Activities

Site soils and piled materials were sampled and characterized in August 2000 by Summit. Over forty site locations were sampled during the initial site characterization project. FMC then selected a phased sample analysis strategy to guide soil remediation and waste management.

Summit mobilized to the site on August 2, 2000 and a site reconnaissance was completed. Site areas that appeared to be impacted by treater (precipitator) dust were noted. Five site areas were identified as potentially requiring remedial actions. For characterization, the largest area was divided into five zones based upon the apparent depth of waste. Sub-samples were collected from each area and composited for laboratory analysis. The five site areas identified and the number of sub-samples composited were:

Yard area north of pavement (Zones 1 through 5)

Zone 1 - 4 sub-samples

Zone 2 – 6 sub-samples

Zone 3 – 6 sub-samples

Zone 4 – 6 sub-samples

Zone 5 – 6 sub-samples

Southwest fence line waste piles – 6 sub-samples

Northeast yard waste piles – 4 sub-samples

Pavement trenches – 8 sub-samples

Perimeter fence line (south half of property) – none collected

Soils below the waste material were collected as six-inch soil cores. Sample depths were 0 to 6 inches and 12 to 18 inches.

Laboratory analyses were completed on 46 of the samples collected. Eight waste samples were analyzed for TCLP metals; 37 soil cores were analyzed for total cadmium, arsenic, and chromium; and several select samples were analyzed for total cyanide, amenable cyanide, and pH. Two split samples and two field duplicates were analyzed for QA / QC purposes.

Laboratory results are summarized in Appendix 4 - Initial Characterization Figures and Soil Laboratory Results - August 2 - 3, 2000. The waste material samples all had TCLP cadmium concentrations greater than 1.0 mg/L. The underlying soils had total cadmium concentrations ranging from 1.1 to 841.0 mg/ Kg. Appendix 4, Figure 2, shows sample locations and the data table shows the metals and cyanide results. Chromium and arsenic concentrations were not above the risk based concentrations (RBCs) for worker exposure to surface soil, as calculated by EPA for the adjacent FMC portion of the Eastern Michaud Flats Superfund site. The applicable RBCs are found in Table 2.3-1 of the Feasibility Study Report – FMC Subarea (April 1997). Areas of the Williamsen property where sampling indicated total cadmium concentrations were greater the cadmium RBC of 448 mg/kg (also found in Table 2.3-1 of the FS) were scheduled for remediation through removal and off-site disposal.

Soil Removal and Post Remediation Sampling

Waste and soil removal actions were conducted in November of 2000 and the Summer of 2001 by Envirocon Inc. All visible treater (precipitator) dust was removed from the North Yard Area, along fence lines, and from asphalt-lined trenches. The contaminated soil excavated and stockpiled in November of 2000 was loaded and transported to Envirosafe Services of Idaho (now US Ecology) located at Grandview, Idaho in December of 2000. The US Ecology Grandview site is a RCRA Permitted Subtitle C Hazardous Waste TSD facility. All loads were manifested as hazardous waste and disposal certifications were issued by US Ecology. 106 loads were shipped in December of 2000 for a total of 3,524.83 tons. Cold weather and heavy snows delayed the final removal and closure sampling until the following summer.

Appendix 6 contains the post remediation Sampling and Analysis Plan. The simple exceedence rule was used to determine whether the site grid area attained the cleanup standard of 448 mg/kg cadmium. November 2000 soil closure sampling indicated that several North Yard grids required further remediation (Appendix 7-Remediation Closure Soil Laboratory Results - Nov. 17, 2000 contains the laboratory results).

Soil samples were collected from various depths using a two inch carbon steel soil probe sampler (see photograph 4 in Appendix 5 for sampler photograph). A decontaminated soil probe along with a new plastic liner was used for each soil core. Samples of precipitator waste were collected using a decontaminated standard shovel. Equipment decontamination consisted of a three-stage wash - an Alconox soap and water wash, a second stage water wash and rinse, and a third stage final water rinse. All equipment decontamination water was deionized water obtained from the FMC plant laboratory.

The North Yard sample points were selected by staking out a pre-measured grid. See Photograph 3 in Appendix 5 for a picture of some staked sample points. Grid measurements, for north south and east west grid lines, were selected using a random number selection system. A new randomly selected grid system was used for each sampling event. The north-south and east-west grid intersection points were then used as reference points. The exact sample point was then determined by the sampler standing on the grid intersection point and, while facing north, dropping a rock over their left shoulder. The rock's resting point was then used as the final soil core sample point.

Additional excavation and stockpiling of soil took place in the Summer of 2001. The contaminated soil excavated and stockpiled during the Summer of 2001 remediation was loaded and transported to US Ecology, Grandview, Idaho in August, September, and October of 2001. All loads were manifested as hazardous waste and disposal certifications were issued by US Ecology. 38 loads were shipped in 2001 for a total of 1,253 tons. All manifests are on record at the FMC Pocatello, Idaho plant. The total tonnage of contaminated soil shipped for disposal in 2000 and 2001 was 4,778 tons. Appendix 10 contains a 2000 -2001 Transport / Disposal Summary for the Williamsen site contaminated soil shipments. The summary table includes manifest number, date, and pounds shipped.

Summary of Soil Removal Field Activities

November 14, 2000 North Area Excavation and Sampling

Summit mobilized to the site on November 11, 2000 to provide oversight for the excavation in the North Yard area performed by Envirocon. Envirocon used a trackhoe, a Bobcat loader, and a dump truck. Summit collected soil samples in the excavated areas to determine if the cleanup criterion was attained. Photographs 1 through 4 in Appendix 5 show site activities and excavated areas during this visit.

Remediation at the site was halted on November 17, 2000 due to inclement weather and was scheduled to continue in the spring. The December 12, 2000 Technical Memorandum in Appendix 7 contains a more detailed description of the events along with field notes and a site drawing.

The area was divided up into a new sampling grid using the grids intersections and analytical results from the Initial Characterization to determine sampling points. Eight soil samples were collected from the remediated north side of the North Yard area and analyzed for total cadmium.

May 23, 2001 North Area Continued Sampling

Summit mobilized to the site on May 23, 2001 to complete the sampling of the remediated North Area. The same November 2000 sampling grid system was used for determining sampling points. Eighteen points were sampled during this site visit and sent to the laboratory for analysis.

Analytical results from the November 2000 and May 2001 sampling event indicated that further (deeper) soil removal was required in the North Area. Further excavation was conducted by Envirocon between June and July 2001 in the North Yard area. Additional material was removed from this entire area in an attempt to meet the cleanup criteria. Also between June and July, Envirocon excavated contaminated soil from the trenches on the site, along the fence lines, and in the areas between the parking lot and the frontage road (U.S. Highway 30)

August 8, 2001 Closure Sampling Event

Summit returned to the site on August 8, 2001 to perform closure sampling on the North Yard area, trenches, fence line, and frontage areas. A new sampling grid system was used for determining sampling points. Sixty-two points were sampled in the North Yard area along with samples collected from the various trenches,

fence lines, and frontage area. The sample size and the X and Y coordinate system were established based upon the EPA guidance document *Methods for Evaluating the Attainment of Cleanup Standards, Volume 1:Soils and Solid Media*, *February 1989.* Photographs 5 through 10 (Appendix 5) show site activities, excavated areas, and stockpiled soils in August 2001.

Analytical results from the August 2001 sampling event indicated that soil cadmium remediation had been successful in most of the North Yard grid areas except for five distinct grid areas (118/4 = 552 mg/kg; 118/42 = 805 mg/kg; 156/80 = 623 mg/kg; 232/42 = 593 mg/kg; 80/80 = 1280 mg/kg). Cleanup of the trenches, fence lines, and frontage areas was also successful except for the south trench (TSD101 = 917 mg/kg deep sample and 1030 mg/kg shallow sample) and the south center frontage area (FSLE84 = 699 mg/kg).

Additional excavation (six inches over the entire grid) was conducted by Envirocon in these areas in August and September 2001. If visual observations indicated that more than six inches of soil needed to be removed, then extra soil was excavated:

Summit returned to the site on September 25, 2001 to sample the re-excavated areas that had cadmium levels greater than 448 mg/kg identified during the August 2001 sampling event. Seven samples were collected from these grid areas. The south trench (STR), the south frontage (SF), and three of the five north yard area grid locations were below the 448 mg/kg cadmium criterion. The remaining two grids, 123/13 and 123/51 were re-excavated and sampled again on November 14, 2001 by FMC personnel. The final two samples showed that grid 123/13 (represented with sample 118/4) met the less than 448 mg/kg cadmium soil target. Grid 123/51 (represented by sample 118/42; 5220 mg/kg cadmium) remained above the closure target of 448 mg/kg. To limit the direct worker contact hazard to

the soils in grid 123/51 and to reduce the fall / trip hazard due to uneven grade, the yard area was graded level and Envirocon demobilized from the Williamsen site.

Appendix 9 – Remediation Closure Figures & Soil Laboratory Results – August, September, & November 2001, contains the final soil remediation closure laboratory data and chain of custody records. Appendix 9, Figure 1 – North Field Soil Cadmium Concentrations shows the final soil sample locations and cadmium concentrations for the north field area. Figure 2 – South Site Soil Cadmium Concentrations, shows the final soil sample locations and cadmium concentrations in the pavement trenches and south fence line areas.

5. Class V Shallow Injection Well (Dry Well) Closure

Shallow Injection Well Design and Background Information - Facility drawings showed that the warehouse floor sumps and drains tied into a discharge pipe which exited the west side of the warehouse and terminated in a shallow "French Drain" dry well. Appendix 11 - Class V Injection Well Figures, contains the best available schematics of the dry well construction and influent structures. EPA investigated discharges to this shallow injection well in 1991 while the site was being operated by A.E.I. EPA added the Williamsen site dry well to the EPA Inventory of Injection Wells as UIC #10035. The EPA report "Inspection Report for AEI Corporation - Class V Injection Well Inventory - Pocatello, Idaho" prepared by Craig Paulsen (EPA – July, 1991) can be found in Appendix 15 - US EPA Site Documents. The 1996 site assessment by Reeve and Associates contains limited data on solids / soil samples collected from the interior of the dry well. Cadmium concentrations were elevated and low level cyanide was detected in the solids within the dry well. Appendix 14 - Previous Contractor Reports, includes the best available copy of the 1996 Reeve report.

Summit sampled the upper 1.5 feet of solids contained in the dry well in August of 2000. The solids within the dry well were approximately 5 feet below the asphalt surface. Two samples were collected with a hand auger. Sample DW-U was collected from approximately 0 to 6 inches and visually contained organic seed-like material, soil, and small gravel (likely pavement runoff debris). Sample DW-L was collected from approximately 12 to 18 inches and it appeared more sludge-like. Samples DW-U and DW-L were tested for the eight RCRA TCLP metals and a composite of DW-U and DW-L (sample ID: DW-L/DW-U COMP) was analyzed for total cyanide and RCRA TCLP metals. Appendix 12 - Class V Injection Well Closure Laboratory Results and Chain of Custody contains the laboratory reports and chain of custody forms. Total cyanide was measured at 14.4 mg/kg. The TCLP analysis indicated the composite sample was below RCRA criteria for all metals except cadmium, which was measured at 2.44 mg/L. The 0 - 6 inch sample contained slightly elevated levels of total cadmium 897 mg/kg, total chromium 904 mg/kg and 222 mg/kg total lead. Concentrations were considerably lower in the 12 -18 inch sample – total cadmium 68.6 mg/kg, total chromium 53.3 mg/kg and total lead 63.3 mg/kg.

Shallow Injection Well Closure - The shallow injection well (UIC #10035) was closed in August of 2001 through removal and over excavation. FMC contracted with Envirocon Inc. to excavate the dry well area and stockpile the soil.

Approximately 40 to 50 cubic yards of dry well material and soil were removed and properly disposed. The excavated material was managed as RCRA hazardous waste and was transported to US Ecology, Grandview, Idaho in December of 2000. The US Ecology Grandview site is a RCRA Permitted Subtitle C Hazardous Waste TSD facility. All loads were manifested as hazardous waste and disposal certifications were issued by US Ecology.

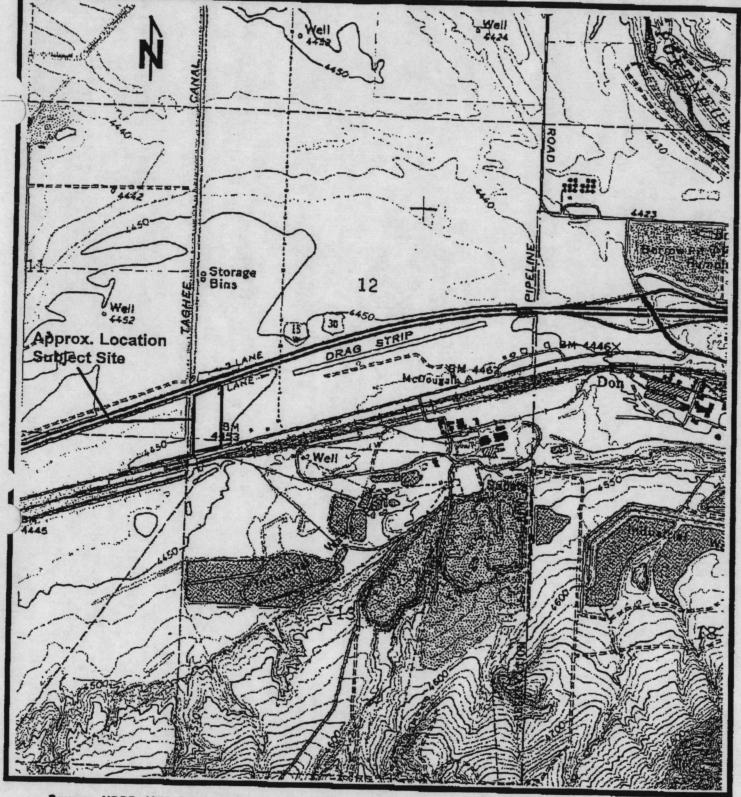
The side walls and bottom of the excavation were sampled on August 1, 2001. The excavation was approximately 15 to 17 feet deep. The sub-surface consisted of sandy gravel material. Appendix 11 contains the Summit August 1, 2001 excavation log and three detailed FMC soil boring logs and monitoring well construction details (wells 521, 522 and 523; directly east of the Williamsen dry well). Groundwater was not encountered in the excavation. The FMC Superfund project soil borings indicate that ground water was encountered at approximately 55 to 56 feet below grade.

Given the operational history of the Williamsen site as a truck repair facility and a metals extraction operation, closure sample analyses included BTEX by Method 8260, purgable halocarbons by Method 8260, total cyanide, amenable cyanide, and the eight RCRA metals (totals). The laboratory reports are included in Appendix 12. Both samples were non-detect for BTEX compounds and purgable halocarbons. The total metals and cyanide results were not remarkable for the side wall sample ID: COMP-DWS. The bottom sample ID: COMP-DWB showed total concentrations of lead at 1,720 mg/kg, total cadmium at 209 mg/kg, and total cyanide at 109 mg/kg and amenable cyanide at 77.5 mg/kg. The other six metals were not remarkable. The excavation was backfilled to grade with clean material and compacted. There is little or no expected impact to groundwater.

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APPENDIX 1

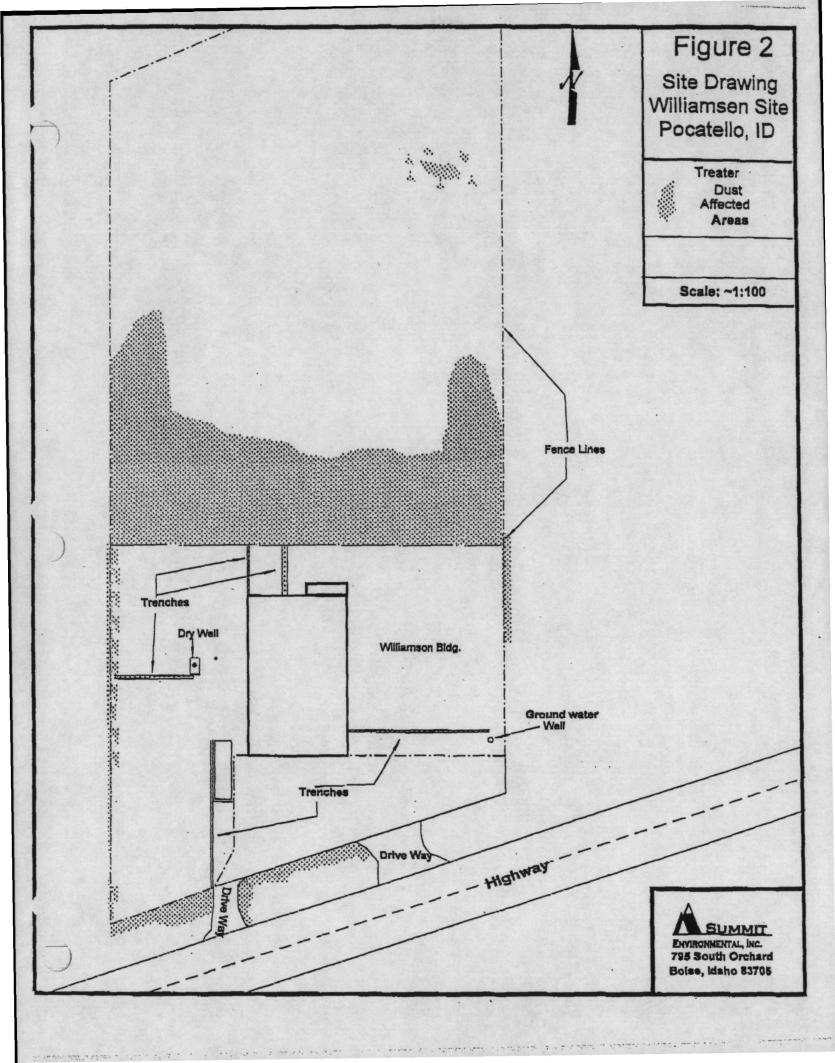
- Figures
 Vicinity Map
 Site Drawing



Source: USGS, 1974, Michaud Quadrangle, Idaho, 7.5 Minute Series (Topographic), Denver, CO: U.S. Geological Survey.



FIGURE 1: VICINITY MAP Williamsen Site 1297 Highway 30 West Pocatello, Idaho



APPENDIX 2

UST Closure Records

- Work Plan
- Notice of Closure
- UST Closure Report
- UST Content Management

WORK PLAN

FMC ABINGDON SITE Removal of Two USTs and Clean Closure RFQ # 4100001857

Prepared for

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Summit Project # 33.005.01

January 31, 2000

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1.0 INTRODUCTION

FMC CORPORATION has requested proposals to remove two USTs from a parcel of land located northwest of their phosphorus plant in Pocatello, Idaho. The site will be referred to as the Abingdon Site. The property is situated on the Fort Hall Indian Reservation between Highway 30 and Interstate 86 (see Attachment #1 and #2). FMC acquired the property in 1999 and has verified the existence of two underground storage tanks (USTs) through records review and the presence of two apparent fill spouts west of the shop building.

The property was formerly a truck repair facility and had been leased to a business that recycled process waste from various local industries. The former lessee is known to have abandoned some waste material at the facility. The true and complete operating history of the USTs is unknown. It is known that the USTs have been out of service for many years and the integrity and contents of the USTs are unknown.

This work plan outlines the tasks which will be completed to properly decommission the two USTs through a clean close scenario. Summit is recommending several supplemental tasks to the RFQ to help address waste management issues and site safety concerns. The additional tasks are suggested because FMC Corporation does not have owner/operator information on the UST system or generator knowledge of the current contents of the UST system. The UST system will be investigated by performing a brief historical records review, a utility survey, an electromagnetic geophysical survey and a thourough analysis of the contents. Two USTs and associated piping will be properly decommissioned and closed by removal.

The U.S. Environmental Protection Agency (EPA) has retained jurisdiction for the UST permitting, compliance, and closure activities on the Fort Hall Indian Reservation. All applicable notifications will be made to EPA, local government agencies, and the Fort Hall Indian Reservation as required.

2.0 SCOPE OF WORK

2.1 Task #1 Pre-UST Closure Activities

2.1.1 Records Review

Summit Environmental will communicate with FMC project personnel to obtain all known information pertaining to the UST area, including aerial photographs, maps, and other records. The records will be reviewed for past land uses to identify probable project issues related to the UST locations and uses. The records review findings will be summarized in a Technical Memorandum and forwarded to FMC for review prior to field activities. The Technical Memorandum will contain, for FMC review, a brief sampling and analysis plan for the UST system contents.





Summit Environmental personnel will attend FMC's safety briefing at the Phosphorus Chemical Plant located in Pocatello, Idaho. All contractor and subcontractor personnel that will perform work on FMC property will participate in the training or will show documentation of current training.

2.1.3 Meetings with Fort Hall Tribe Personnel

Summit Environmental will meet with Ms Donna Miller of the Tribal Employment Rights Office (TERO) located in Fort Hall, Idaho. Summit Environmental personnel will present the project scope-of-work and manpower requirements for the project. Ms Miller has already provided a list of subcontractors from the reservation that could safely provide services for the project. Summit Environmental envisions the use of a backhoe and dump truck subcontractor. Temporary workers, if needed, will be placed on Summit Environmental's pay roll.

2.1.4 Site Specific Health and Safety Plan

Summit Environmental will prepare a Site Specific Health and Safety Plan for use during the UST sampling and removal activities. The plan will address site specific health and safety issues identified during the record review activities and the inherent health and safety issues associated with UST decommissioning. Summit anticipates the final Plan will contain safety information relating potential to heavy metal exposures in soil and unknown compounds within the USTs.

The contents of the Health and Safety Plan will be reviewed with all employees prior to the start of on-site work. All personnel entering the site shall previously had completed FMC site training, be current on OSHA 40 hour HAZWOPER training and they shall acknowledge that they understand the contents of the UST project plan by reading and signing the plan.

The Summit Environmental Site Safety Plan is attached.







2.1.5 Utility and Geophysical Investigation

2.1.5.1 Scope

The objective of the proposed surveys is to determine size, depth, and orientation of the suspect USTs and to verify or dismiss the presence of additional UST's in the area. The work scope is based on an approximate UST system area of 100 X 100 feet. The scope will include a magnetic field survey and, if needed and approved, a select ground penetrating radar profile (GPR). The GPR profiles will be used if uncertain conditions related to UST size, depth, and orientation. GPR can provide a higher degree of certainty by investigating sites identified in the magnetic field data, if needed. The base lump sum price does not include a GPR survey.

2.1.5.2 Technical Approach

A combination of tools will be used to meet the project objectives. Those tools will include a detailed magnetic field survey and, if needed, ground penetrating radar (GPR). Iron and steel storage tanks produce local variations in the earth's magnetic field. When mapped, these anomalies will reveal the location of the tank. In general, magnetic field mapping is a excellent method to screen sites for UST's and other buried ferrous objects. Because ambiguities may remain, ground penetrating radar may also be used to enhance the conclusions drawn from the magnetic field map.

The survey will be conducted in the following sense. Site background and conditions will be evaluated. A local 100 ft by 100 ft survey grid will be established and tied to site features. The grid will serve as control for the geophysical survey. Magnetic field data will be collected over the UST system area and mapped. A field skech of the magnetic field of the UST area will be produced and compared to anticipated UST system data. The utility survey will be conducted in conjuction with the initial UST content sampling.

If needed, select GPR profiles will be collected to evaluate the suspect USTs for size, depth, and orientation. Additional suspect UST locations, if any, identified in the magnetic field data will also be investigated using GPR. Additional profiles may be conducted based on air photos, historical accounts, or surface features. The number and locations of the GPR profiles will depend on information produced from the magnetic field data and other site information.

2.1.5.3 Deliverables

Summit will prepare a brief summary and a site summary map prior to field excavation







activities. Conclusions will be used in the preparation of the final Health and Safety Plan All data and deliverables will be considered proprietary and treated as confidential.

2.1.6 UST Contents / Sludge Characterization

Summit Environmental will examine and sample the contents of the two USTs. The purpose of the sampling is to identify proper safety procures during UST removal and proper waste management requirements. Both USTs have what appears to be accessible fill spouts. The south UST has been opened and stuck. Approximately 7 to 9 inches of liquid material is present. In a 500 gallon UST, this may be 50 to 85 gallons of material. If the UST testing indicates a hazardous waste, the Abingdon facility may require an EPA RCRA identification number. If requested, Summit will prepare all necessary paper work for FMC signature.

Health and safety issues will be important when accessing the North UST. Summit will conduct air monitoring near the fill pipes prior to opening. Air monitoring will consist of oxygen, LEL, VOCs and cyanide. Once open, the inside of the USTs will also be monitored for these compounds. When all safety issues have been reviewed, a sample of the UST contents will be collected for laboratory analysis. The sample will be collected with a disposal bailer or other equipment, as needed. The sample will visually inspected and then packaged in a cooler with water or blue ice and forwarded to an approved FMC laboratory.

Given the unknown / unverifiable previous uses of the USTs, the suspect operations of the AEI Corporation, Summit recommends some supplemental project sampling in addition to the basic petroleum UST sampling and analysis. a sample from each UST will be tested for 8 TCLP RCRA metals, reactivity, total cyanide, amenable cyanide, flash point, BTEX, TOX, total PCBs and pH using EPA SW846 laboratory testing procedures. FMC in consultation with Summit Environmental may recommend additional laboratory analysis based upon field observations of the sample.

In the event additional USTs are located during the geophysical investigation and the tanks are found to contain liquids, additional samples will be collected and characterized in a similar capacity. If no openings exist for sampling the tanks, sludge samples will need to be collected during the tank decommissioning activities.

2.1.7 Letter Report

Summit Environmental will prepare a letter report once the record review, geophysical investigation, and tank contents / sludge characterization activities are completed. The letter report will summarize the field and laboratory findings; discuss the utility assessment and provide recommendations for additional site characterization activities, if required; and provide recommendations for UST decommissioning activities.



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2.2 Task #2 UST Closure Activities (Assumes Petroleum USTs)

2.2.1 UST Decommissioning Activities

Once the USTs contents have been identified, Summit Environmental will make notification to EPA to close the tanks. FMC may make notifications to tribal staff or other interested parties, if desired. No specified waiting period is required by EPA to proceed with the tank closures, but EPA will likely request a 3 to 5 day lead time so that they may schedule to have someone on-site during the closure activities. The following tasks are based upon the UST contents characterization and utility locates identifying a 500 gallon hydraulic oil UST and a 500 gallon diesel or gasoline UST

Summit Environmental will provide all necessary labor, equipment, and materials to excavate and decommission the USTs. Summit Environmental will apply for all required permits from the Fort Hall Reservation. The USTs will be decommissioned in accordance with American Petroleum Institute (API) Recommended Practice 1604 and local fire code requirements.

The supply piping will be drained back to the USTs. If the tanks contain more than 1 to 3 inches of liquids, the liquid will be pumped from the tanks and collected in 55 gallon drums for subsequent characterization and disposal. The tank atmosphere will be checked using a combustible gas indicator to determine if the explosive limit within the tank is within an acceptable range prior starting the excavation and removal activities. The lower explosion limit (LEL) in the tank shall not exceed 20 percent of the lower flammable limit during the tank removal activities. Dry ice or CO₂ may be used to purge the tank of combustible vapors. Once the LEL is below 20 percent, the tank may be excavated, the piping removed, and the tank removed from the excavation. The LEL in the tank will be checked several times during the decommissioning activities to ensure that the LEL does not exceed 20%.

Once the tank has been removed from the tank basin and before cutting the tank, the LEL of the tank will be checked and adjusted to less than 10% of the lower explosion limit. The ends of the tanks shall be cut using a sawzall or cutting torch to allow access into the tank for cleaning. Prior to entering the tank, the tank will be ventilated to remove organic vapors and to provide a minimum oxygen content of 19.5 %.

PPE protection will be worn while working near the tank. The minimum PPE requirement will be tyvek, rubber boots, gloves, and a half face respirator with combination organic vapor and dust cartridge. Canister type respirator must not be worn in an oxygen deficient atmosphere (<19.5%). The level of PPE may be upgraded to positive pressure supplied air respirators at the discretion of the field supervisor and/or depending on the sludge characterization activities. The tank contents shall be removed by pumping, shoveling, or sweeping and the use of floor dry. The sludge will be placed in 55 gallon drums or other approved D.O.T. containers for subsequent characterization and disposal.





The cleaned tanks will be transported to Pacific Steel and Recycling located in Pocatello.

Closure soil samples will be collected from the tank basin in accordance with Idaho UST Information Series #3, dated March 1994. Four soil samples will be required. One beneath each UST and one for every 20 feet of piping run.

The samples will be packaged on water ice or blue ice and forwarded to a FMC approved laboratory. The soil samples will be tested for total petroleum hydrocarbons, and benzene, toluene, ethyl benzene, and xylene (BTEX). The samples may be tested for additional constituents if additional hazardous materials are identified in the tank contents / sludge. Any required additional testing will be in addition to the lump sum price quote.

2.2.2 UST Tank Basin Backfill Activities

Once it is determined that the tank basin can be backfilled, backfill material will be transported by a Summit Environmental Subcontractor from the designated FMC borrow pit to the tank basins. The fill will be placed in 2 to 3 feet thick lifts and tamped with the backhoe bucket. No compaction quality control tests will be performed during the backfill activities. The tank basins will be graded to the adjacent ground elevations. The backfill may require re-working in the event pavement or structures are located in the basin areas in the future.

2.3 Task #3 POST- UST Closure Activities

2.3.1 Final Report

Summit Environmental will prepare a written report to document the tank closure activities. The report will document the field activities, including sample locations, tank cleaning and disposal, laboratory data on the tank contents / sludge, site drawings, and will include the completed EPA UST notification and closure forms. The lump sum price quote assumes a RBCA Tier 0 closure (clean close).

FMC project personnel will need to sign the EPA UST closure forms. Summit or FMC can submit the required UST closure documentation to the EPA.

2.4 Task #4 Abandon Material Inventory

Summit will conduct an inventory of containers which are present at the Abingdon site. The inventory will be used to assess recycling potential and possible waste disposal options. An inventory list will be prepared and submitted to the FMC Project Manager.



FMC Corporation

Phosphorus Chemicals Division PO Box 4111 Pocatello. Idaho 83205 (208) 236-8200

April 28, 2000



Brad Harr Summit Environmental, Inc. 5257 Fairview Avenue Suite 260 Boise, ID 83706

Brad,

Enclosed please find a copy of the letter to David Bernie notifying him of the completion of the UST closure. The revisions to the Closure Notice were as you recommended.

Doug Bennent / Jugm. Doug Bement, P.E.

FMC/FES Project Manager

FMC Corporation

Phosphorus Chemicals Division PO Box 4111 Pecatello, Idaho 83205 (208) 236-8200

April 24, 2000



Mr. David Bernie US EPA Region X 1919 È. Francis Spokane, WA 99207

Dear Mr. Bernie,

Thank you for your assistance in the recent removal of two underground storage tanks at the 1297 Highway 30 West property in Pocatello, Idaho. Attached are the UST Closure Report for the tanks removed March 2, 2000 and the revised Notice of Closure. If you have any questions or comments concerning this matter, please don't hesitate to call.

Sincerely,

Doug Bement, P.E.

FMC Project Manager

Attachment



Idaho Division of Environmental Quality UNDERGROUNL STORAGE TANKS

Revised 4/24/00

30 DAY NOTICE OF CLOSURE

FACILITY ID#:		COUNTY:	COUNTY:					
SITE/FACILITY INFORMATION:								
Facility Name: TESCO 5/78								
Facility Location: 297 Houses 30 WEST ROMEWO, ID 83202 Street City, State Zip Phone: 1208) 236-8636 Fire District: RWEN County								
Phone: (208)	236-8636	Fire District	PEWER CONT	Z				
OWNER/OPERATOR INFORMATION: Owner/Operator: FMC (c22-2-mic/v)								
Mailing Address: P.O. Bex 4/// Pecantle, In 8305								
	236-8636	Street	City, State	Z÷				
TANK INFORMATION: (attach additional pages if needed)								
ACCORDANCE With §280.71 of the Federal EPA Underground Storage Tank Regulations, we are notifying you of our intent to								
TANK ID	se the following tanks: PROJECTED CLOSURE DA	TANK CAPACITY	DAIDC VIN LATE LATE STORED V DATE LAST USED					
/	2/23/00	~500 GAS	HUDRALLIC DIL	ANDEX 1892				
.2	2/23/00	1-500 GAS	GASOLINE	2000x 1992				
	7 - 7							
CLOSURI	E TO BE PERF	ORMED BY:						
Name of Site Supervisor: MIKE LAZANCO								
Name of Contracting Firm: Summit ENVIRONMENTAL, INC. Phone: 208-377-2900								
Site Assessor: B240 Happa - Summit Invitermenta/for. Phone: 208-377-2900								
	•							
I have read the instructions on page 2 and concede the above-stated information is complete and accurate.								
OWNER/OPERATOR SIGNATURE: Our Bennes DATE: 2/15/00								
Only signatures by owner/operators will be accepted. UST technicians' signatures cannot be used.								
	Tanks Wast P	a Degriciared Prior	to Submission of ti	ns Tourn				

FMC Corporation

Phosphorus Chemicals Division PO Box 4111 Pccatello. Idaho 83205 (208) 236-8200

April 24, 2000



Mr. David Bernie US EPA Region X 1919 E. Francis Spokane, WA 99207

Dear Mr. Bernie,

Thank you for your assistance in the recent removal of two underground storage tanks at the 1297 Highway 30 West property in Pocatello, Idaho. Attached are the UST Closure Report for the tanks removed March 2, 2000 and the revised Notice of Closure. If you have any questions or comments concerning this matter, please don't hesitate to call.

Sincerely,

Doug Bement, P.E. FMC Project Manager

Attachment



Idaho Division of Environmental Quality UNDERGROUNL STORAGE TANKS

Revised 4/24/00

30 DAY NOTICE OF CLOSURE

		FACILITY ID#:COUNTY:					
SITE/FAC	ILITY INFORM	IATION:					
Facility Name: TESO 5/78							
Facility Loca	tion: 297 Hickory	30 WEST	POCAZUCI, ID City, State PEWE, ? Cany	83202			
Phone: (208)	236-8636	Fire District	: PEWER CONT	Z			
	025245022						
	OPERATOR IN	FORMATION:					
	ress: P.O. Bex		PORTELLO ID	83205			
	236-8636	Street	City, State	Zip			
		(attach additional	pages if needed)				
TANKINFORVIATION: (attach additional pages if needed) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							
nanendy sio	se the following tanks:	·	PRIOR VILLE CONFRAMINA PE	NOW 6			
TANK ID	PROJECTED CLOSURE DA	TANK CAPACITY	SUBSTANCE STORED V	DATE LAST USED			
/	2/23/00	~500 GAS	HUDSTRILIC DIL	DIDEX. 1992			
.2	2/23/00	~500 GMS	GASOLINE	арагох 1992			
	′						
CLOSUR	E TO BE PERF	ORMED BY:					
Name of Site	e Supervisor: Mike	E LAZANICO					
Name of Contracting Firm: Summit Eurnameum, Inc. Phone: 208-377-2900 Site Assessor: B240 Happa - Summit Invited man la Laure Phone: 208-377-2900							
<u> </u>							
I have read the	e instructions on pag	e 2 and concede the above	e-stated information is con	iplete and accurate.			
OWNER/OP	ERATOR SIGNAT	URE: Our E	Jennes	_DATE: 2/15/00			
		<i>i</i> 1	ST technicians' signature	s cannot be used.			
*	Tanks Must B	e Reugiered Prior	to Submission of th	nis Form			

dentification Number	Tak No	Tank No. <u> ✓</u>	Tank No	Tank No	Tank No.	
Compartmentalized Tanks? (circle one)	YES I NOUNK	YES / NO DAY) YES/NO	YES / NO	YES / NO	
A. Status of Tank			-	s.		
Currently in Use						
Temporaniy Cut of Use (Complete Section X Economic Complete Use)						
Fermanently Out of Use						
(Стона Section X. этка геночей ог стана и стана)		D_{2}				
7			SSOF BRING	LECONNISS	ENIN OU PEM	
Date of installation (molyear)	~ 1978	~ 1978	<u> </u>		-	
Estimated Total Capacity (gallons)	500	500				
E. Material of Tank Construction (Mai	k all that apply)	1000	(A) 4/24/80	•	·	
Asphalt Coated or Bare Steel						
Cathodically Protected Steel						
Epoxy Coated Steel						
Composite (Steel with Fiberglass)						
Ficerglass Reinforced Plastic						
Lined Interior						
Couble Walled						
Polyethylene Tank Jacket						
Concrete						
Excavation Liner						
Unknown						
Other, Please specify	ENKYCUN	EJN KUCWN			<u> </u>	
Has tank been repaired? (circle one)	YES NO	YES INO	YES / NO	YES / NO	YES / NO	
C. Piping (Material)						
(Mark ail that apply) Bare Steel						
Galvanized Steel						
Fiberglass Reinforced Plasto						
Capper				<u> </u>		
PlastoFiexible						
Cathodically Protected						
Couble Wailed						
Excavation Liner						
Other, Please specify	inkucin	Walkeeun				
D. Piping (Type) (Mark all that apply)		,				
Suction: no check valve at tank	ipkyown	UNKNINN				
Suction: check valve at tank						
Pressure					i	
Gravity Feed		V				
Gravity reed Figure 1 - Section 1 - Secti	YES (NO)	YES (NO)	YES / NO	YES / NO	YES/NO	

UST Closure Report

For

TESCO Site 1297 Highway 30 West Pocatello, Idaho

Prepared for

FMC Corporation P.O. Box 4111 Pocatello, Idaho 83205

Prepared by

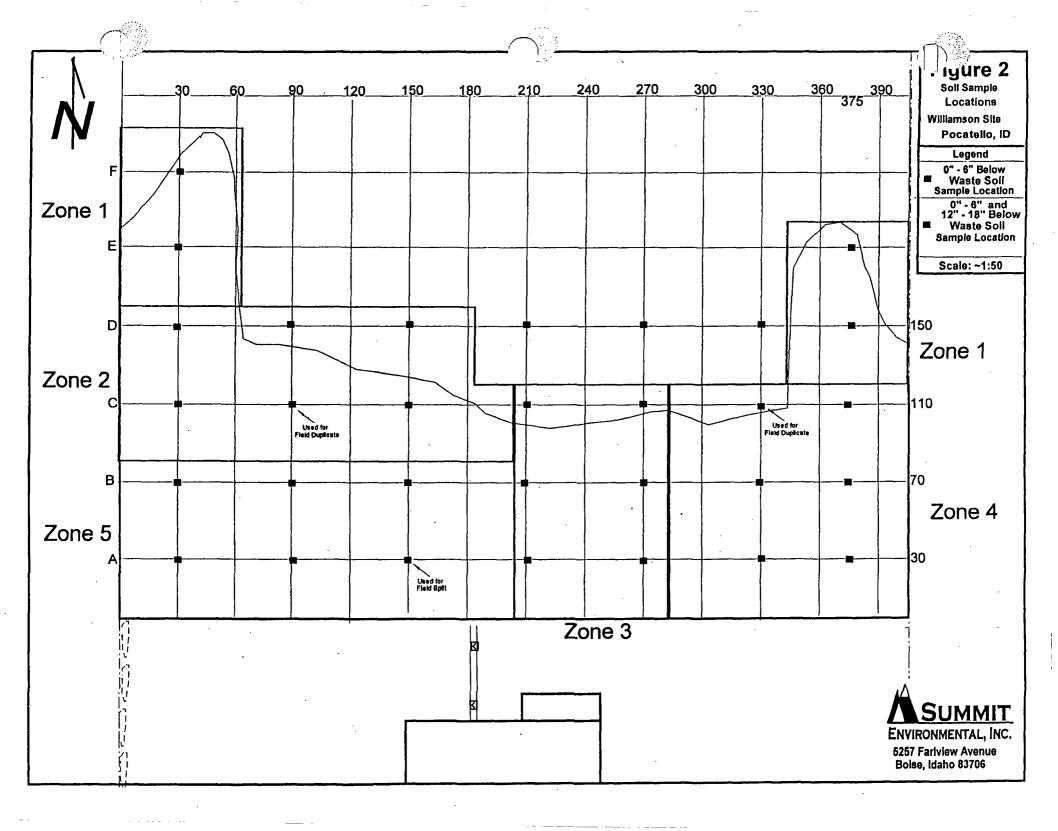


ENVIRONMENTAL, INC. 5257 Fairview Ave., Ste. 260 Boise, Idaho 83706 (208) 377-2900

April 18, 2000

APPENDIX 4

Initial Characterization Figure and Soil Laboratory Results - August 2 - 3, 2000 FMC · Soil



SOIL SAMPLES BELOW WASTE INTERFACE ANALYTICAL RESULTS

_	` 				Anal	ytical Results	<u> </u>		
	Sample Identity	~Depth Below Waste Interface	Zone	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cyanide (mg/kg)	pН	Comments
	A30	0" - 6"	5	3.30	833.00	121.00			
	- A90	0" - 6"	5	4.80	348.00	196.00 V			
	A150	0" - 6"	5	5.50	536.00	20.40 V	,		
	A150-FS	0" - 6"	5	6.00	541.00	19.50 🗲	-	+	Field Split of A150
	A210	0" - 6"	3	3:30	74.15	25.20 🗸			
-	A270	0" - 6"	_3	4.50	173.00	17.30 🗸		7.12	
	A330	0" - 6"	4	5.30	40.69	17.20 V	-		
-	A375	0" - 6"	4	8.10	142.00	34.60 V			
	B30	0" - 6"	5	3.00	470.00	16.10 √ .			
I	B90	0" - 6"	5	3.00	63.85	19.30 🗸			
ı	B150	0" - 6"	5	2.70	1.10	11.00 1/,			
ı	B210	0" - 6"	3	7.90	780.00	16.90 ₺	<0.6	6.00	
ı	B270	0" - 6"	3	4.20	1.35	19.20 V,			
	B330	0" - 6"	4	(12.00	20.22	28.30 V		8.80	
ı	B375	0" - 6"	. 1	4.80	689.00	8.50 🗸			
- [C30	0" - 6"	2	4.10	516.00	20.00			
۱	C90	0" - 6"	2	3.30	163.00	17.50₺∕	<0.6	7.31	
	C90-FD	0" - 6"	2	3.60	181.00	17.90 <		-	Field Duplicate of C90
	C150	0" - 6"	2	5.50	557.00	16.70 r/			
_:	C210	0" - 6"	3	3.30	292.00	17.50 🗸			
	C270	0" - 6"	3	5.10	1.72	19.50			
- 1	C330	0" - 6"	4	4.80	28.83	17.00 🗸			
I	C330-FD	0" - 6"	4	4.80	12.67	17.40		<u> </u>	Field Duplicate of C330
ŀ	C375	0" - 6"	4	7.90	507.00	10.00			
ı	D30	0" - 6"	2	4.30	132.00	22.20			
ł	D90	0" - 6"	2	3.80	218.00	18.80 🗸		7.58	
1	D150	0" - 6"	2	3.50	1.10	16.60 V			
ŀ	D210	0" - 6"	NA	2.90	1.54	15.50			
I	D270	0" - 6"	NA	3.80	. 1.73	14.50			
	D330	0" - 6"	NA	3.30	1.20	16.80 V			
	D375	0" - 6"	1	5.00	841.00	25.60			
	E30	0" - 6"	1	6.00	145.00	16.80 🗸	V		
1	E375	0" - 6"	1	4.00	260.00	15.80 v			
	F30	0" - 6"	1	3.80	15.48	18.20 V		8.36	
	PUD	0"- 6"	2	3.10	129.00	10.00			
١	PUD-D	12" - 18"	2	3.50	141.00	91.00			
	SWF	0" - 3"	NA	7.30	604.00	39.30			



COMPOSITE/

S OF WASTE



TCLP Metals Results (mg/L)									Other Re	sults (Cyanide	es mg/kg)]			
Sample identity	Composite Points	~ Waste Depth	Zone	As	Ва	Cd	Çr	Pb	Hg	Se	Ag	Total Cyanide	Amenable Cyanide	рH	Comments
CZ1W	D375 E30 E375 F30	3" 3" 3" 4"	1	0.047	<0.3	4.36	0.01	<0.006	<0.0002	0.029	0.016	NA	NA	5.93	
CZ2W	C30 C90 C150 D30	8.5" 9.5" 9" 4"	2	0.059	<0.3	11.1	<0.006	0.012	<0.0002	0.071	0.09	NA	NA	5.55	
CZ3W	A210 A270 B210 C270	5.5" 3		0.131	<0.3	7.09	0.01	<0.006	<0.0002	0.115	<0.006	NA	NA	5.57	·.
CZ4W	A330 A375 C330 C375	10" 17" 11" 6"	4	0.119	<0.3	6.45	0.011	0.012	<0.0002	0.109	0.009	NA	NA .		CZ4WFS - Field Split
CZ5W	A30 A90 A150 B30 B90	22" 27" 4" 12" 25'	5	0.07	<0.3	9.51	0.006	0.016	<0.0002	0.079	0.039	NA	^ A		
CZ4WFS	A330 A375 C330 C375	10" 17" 11" 6"	4	0.107	<0.3	5.87	0.01	0.014	<0.0002	0.1	<0.006	NA	NA	5.56	Split sample of CZ4W
стw	ST-1 ST-2 WT-1 WT-2 NT-1 NT-2 ET-1 ET-2	>6" >6" 12" 12" 6" 6" >8"	NA	0.036	<0.30	3.18	0.01	<0.006	<0.0002	0.065	<0.006	NA	NA	NA	Composite of north, south, east, and west trenches. 4 inch perferated pipe discovered in south trench.
WFW-1	Composite of 6 points	piles of waste	NA	0.034	<0.3	2.31	<0.006	<0.006	<0.0002	<0.025	<0.006	24	<0.5	NA	Composite of 6 points from waste piles along westfence line (20', 60', 100', 140', 180', 220')
CPW	Composite of 4 points	piles of waste	NA	0.214	<0.3	15.4	0.031	<0.006	<0.0002	0.08	<0.006	NA	NA	NA	Composite of 4 points from northeast waste piles



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

-08/02/2000 DATE COLLECTED -

TIME COLLECTED --14:15

DATE RECEIVED - - - 08/03/2000

DATE REPORTED - - - 08/24/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

SOURCE -: CTW / SOIL / TCLP / P: WILLIAMSON / PN# 33-003.05

83205

LAB SAMPLE NUMBER - 11513

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.036	08/10/2000	MM
BARIUM	< 0.30	08/10/2000	MM
CADMIUM	3.18	08/10/2000	MM
CHROMIUM	0.010	08/10/2000	MM
EAD	< 0.006	08/10/2000	MM
FRCURY	<0.0002	08/10/2000	SQ
LENIUM	0.065	08/10/2000	. M M
SILVER	<0.006	08/22/2000	MM

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Laboratory Manager





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

13:42

DATE RECEIVED:

08/03/00

DATE REPORTED:

08/18/00

PROJECT: WILLIAMSON / PN# 33-003.06

SOURCE: WFW-1 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11512

PERCENT MOISTURE: 2.5%

ANALYSIS

RESULTS

(mg/kg)

CYANIDE AMENABLE TO CHLORINE

CYANIDE

< 0.5

24.0

Suzanne Howell, Laberatory Manager

RECEIVED

23 22 22

SUMMIT ENVIRONMENTAL, INC.



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO DATE COLLECTED - - -08/02/2000

TIME COLLECTED - - -13:42

DATE RECEIVED - - - 08/03/2000

DATE REPORTED - - - 08/14/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

SOURCE ~: WFW-1 / SOIL / TCLP / P: WILLIAMSON / PN# 33-003.05

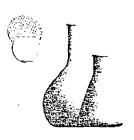
83205

LAB SAMPLE NUMBER - 11511

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.034	08/10/2000	MM
BARIUM	< 0.30	08/10/2000	MM
CADMIUM	2.31	08/10/2000	MM
CHROMIUM	< 0.006	08/10/2000	MM
T.EAD	< 0.006	08/10/2000	MM
ERCURY	< 0.0002	08/10/2000	SQ
ELENIUM	<0.025	08/10/2000	MM
SILVER	<0.006	08/10/2000	MM

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/02/2000

TIME COLLECTED - - -14:37

DATE RECEIVED - - - 08/03/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

SOURCE -: CPW / SOIL / TCLP / P: WILLIAMSON / PN# 33-003.05

LAB SAMPLE NUMBER - 11514

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	$\mathit{RESULTS}$	DATE ANALYZED	ANALYST
ARSENIC	0.214	08/17/2000	MM
BARIUM	<0.30	08/17/2000	MM
CADMIUM	15.4	08/17/2000	MM
CHROMIUM	0.031	08/17/2000	MM
C. F.EAD	<0.006	08/17/2000	MM
TRCURY	<0.0002	08/10/2000	SQ
ELENIUM	0.080	08/17/2000	MM
SILVER	<0.006	08/17/2000	MM

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Laboratory Manager



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SAMPL	377-2900 377-2929 SAMPLER (S) Bralley flaur PROJECT OR SIJE WE WE LEARSON Chain of Custody Form							MOD	TPH - 418.1	CI SOLVENTS (601 / 8010)	602 / 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	8081)	SEMI-VOLATILES (625/8270) TOLP-(DESPENATE KANNYSE)	FALS	EAD GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) FDC (8010)	L OILS	A - MOTOR OILS (8020), PAH (8270)	O Control	a Growing	,		OF CONTAINERS
LAB NUMBER	DATE	TIME	SAMPLE IDEN		WATER		OTHER	TPH - 8015 MOD	TPH - 418.1	CI SOLVEN	VOC's (601-602 / 8021)	GC-MS VOC	PHENOLS (604 / 80	PESTICIDES	PCB's (608 / 8081)	SEMI-VOLATILES (TCLP-(DESEMARE)	8 RCRA METAL	RBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEAI BTEX+N+M (80	RBCA - FUEL OILS BTEX (8020). PAH (8270)	RBCA - MOTOR OF BTEX (8020), PAH (82 CL SQLVENTS (8010)		Huma			NUMBER
11511	8/2/00	1342	WFW-1												1	4										
11512	1/2/00		WFW-1																			+	4			
11513	6/2/00	1415	CTW													X										
11514	1/2/00	1437	CPW													Х										
			·																							
																		-								
	REL	INQUISHED	BY (Signature)	DAT	E				TII	ME								REC	EIVE	BY (Signati	ure)				
B	Bradley Hour							16	5	0				ŀ	_ \	es	0		Z 4	Ξερ.						
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Relinquished	d By (Signatu	re)	Date/Time	Received for)	6	8/3,			/Time		2111			With S 3, COC					Ü No Ü No



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

COMP

DATE RECEIVED:

08/03/00

DATE REPORTED:

08/18/00

PROJECT: WILLIAMSON / PN# 33-003.06

SOURCE: DW-L/DW-U COMP

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11510

PERCENT MOISTURE: 14.5%

ANALYSIS

RESULTS

(mg/kg)

CYANIDE

14.4

bwell, Laboratory Manager

RECEIVED

13 2 2 2 2 2 2 2 2 3

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/02/2000

TIME COLLECTED - - - COMP

DATE RECEIVED - - - 08/03/2000

DATE REPORTED - - - 08/14/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

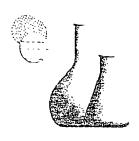
SOURCE -: DW-L/DW-U COMP/TCLF/SCIL /P:WILLIAMSON/PN# 33-003.06

LAB SAMPLE NUMBER - 11509

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.030	08/10/2000	MM
BARIUM	<0.30	08/10/2000	MM
CADMIŬM	2.44	08/10/2000	MM
CHROMIUM	0.010	08/10/2000	MM
EAD	0.020	08/10/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
ELENIUM	<0.015	08/10/2000	MM
SILVER	< 0.006	08/10/2000	MM

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

DATE COLLECTED:

08/02/00

ATTENTION: KELLY PACKARD

TIME COLLECTED:

DATE REPORTED:

15:30

PO BOX 4111

DATE RECEIVED:

09/29/00 10/06/00

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON / PN# 33-003.05

SOURCE: DW-U

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

14804

PERCENT MOISTURE: 22.1%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

6.0

BARIUM

71.0

CADMIUM

897.0

CHROMIUM

904.0

LEAD

222.0

MERCURY

1.63

SELENIUM

< 6.0

SILVER

23.4

Howell, Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

15:20

DATE RECEIVED:

09/29/00

DATE REPORTED:

10/06/00

PROJECT: WILLIAMSON / PN# 33-003.05

SOURCE: DW-L

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

14803

PERCENT MOISTURE: 19.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC BARIUM

CADMIUM

CHROMIUM

LEAD

MERCURY

SELENIUM SILVER

1.5

12.0

68.6 53.3

63.3

0.026

< 0.6

7.8





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LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/02/2000

TIME COLLECTED - - -15:45

DATE RECEIVED - - - 08/03/2000

DATE REPORTED - - - 08/14/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

SOURCE -: ST-S TCLP / SOIL / P: WILLIAMSON / PN# 33.003.06

LAB SAMPLE NUMBER - 11508

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.041	08/10/2000	MM
BARIUM	<0.30	08/10/2000	MM
CADMIUM	0.002	08/10/2000	MM
CHROMIUM	0.012	08/10/2000	MM
EAD ERCURY	< 0.006	08/10/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
ELENIUM	0.021	08/10/2000	MM
SILVER	<0.006	08/10/2000	MM

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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

15:45

DATE RECEIVED:

08/03/00

DATE REPORTED:

08/18/00

PROJECT: WILLIAMSON / PN# 33-003.06

SOURCE: ST-S MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11507

PERCENT MOISTURE: 68.8%

ANALYSIS

RESULTS

(mg/kg)

CYANIDE AMENABLE TO CHLORINE

CYANIDE

1.6 57.1

Suzarine Howell, Laboratory Manager

RECEIVED

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SUMMIT ENVIRONMENTAL, INC.



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LAB NUMBER	DATE	TIME		SAMPLE IDENTIFICA	TION	WATER	SOL	OTHER FER	Ė	BTEX	2 C	3 3	PAH	PHE	PCB.	SEMI	TÖLP	BB S	RBC/	BTEX+N+M EDC (8010)	RBC/ BTEX	RBC/ BTEX CL. SC	70/	Am.			Ž	_
11507	8/2/00	1545	_5	T-5				_				_											X	X			•	
11508	8/2/00	1545	5	T-5													Х										i	A MICIO
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11509	8-2-00	15 20	D	W-LKRIC	158												X						Y				I	
11510	8/2/00	1530	D	W-LSPIE	HESC DIV	\$			-							2	艺	N	0 7]	-
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Bu	Bulley Harm 8-2-							16		SC			To Fed Ex.												<u> </u>			
Relinquished	elinquished By (Signature) Date/Time Received for						tory	Ву ((Sigr	natur	в)				Da	te/Ti		0b		Rece	ived \	With Se	al In	itact?	(2)	Yes () No	



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

16:19

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A30

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11650

PERCENT MOISTURE: 12.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.3

833.0

121.0

Howell, Laboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

16:25

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B30 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11679

PERCENT MOISTURE: 11.9%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM

3.0 470.0

16.1



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

10:12

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C30 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11668

PERCENT MOISTURE: 12.9%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMILIM

CADMIUM CHROMIUM

4.1

516.0

20.0



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

11:10

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D30

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11652

PERCENT MOISTURE: 13.4%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 4.3

132.0

22.2



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

9:25

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: E30 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11649

PERCENT MOISTURE: 12.5%

ANALYSIS

RESULTS (mg/kg)

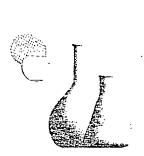
Dry Weight

ARSENIC CADMIUM

CADMIUM CHROMIUM 6.0

145.0

16.8





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

9:20

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: F30 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11645

PERCENT MOISTURE: 11.2%

pΗ

8.36

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.8

15.48

18.2

Howell, Laboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:23

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A90 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11676

PERCENT MOISTURE: 13.6%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

4.8

348.0

196.0



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

16:40

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B90 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11665

PERCENT MOISTURE: 13.4%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.0

63.85

19.3





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

10:30

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C90

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11680

PERCENT MOISTURE:

13.0%

Ηα

7.31

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

CYANIDE

3.3

163.0

17.5

< 0.6



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

10:35

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C90-FD MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11664

PERCENT MOISTURE: 13.2%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

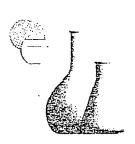
CADMIUM

CHROMIUM

3.6

181.0

17.9





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

10:40

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D90

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11656

PERCENT MOISTURE:

pН

13.7%

7.58

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.8

218.0

18.8



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:07

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A150 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11663

PERCENT MOISTURE: 11.3%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

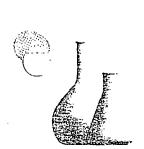
ARSENIC CADMIUM

CHROMIUM

5.5

536.0

20.4





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:07

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A150FS MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11675

PERCENT MOISTURE: 10.8%

ANALYSIS

RESULTS (mg/kg)

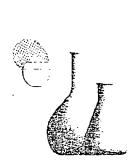
Dry Weight

ARSENIC

CADMIUM CHROMIUM 6.0

541.0

19.5





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

16:53

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B150 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11678

PERCENT MOISTURE: 19.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

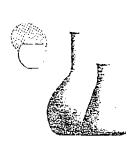
ARSENIC CADMIUM

CHROMIUM

2.7

1.1

11.0





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Water, Waste Water and Soil Analysis

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FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

11:03

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C150 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11662

PERCENT MOISTURE: 14.3%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM.

CHROMIUM

5.5

557.0

16.7



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water, and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

11:15

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D150 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11653

PERCENT MOISTURE: 16.2%

ANALYSIS

RESULTS (mg/kg)

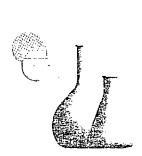
Dry Weight

ARSENIC CADMIUM

CADMIUM CHROMIUM 3.5

1.1

16.6





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

11:40

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A210 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11658

PERCENT MOISTURE: 15.1%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM CHROMIUM 3.3

74.15

25.2





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:00

DATE RECEIVED:

08/04/00 -

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B210

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11651

PERCENT MOISTURE: 16.4%

рΗ

6.00

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

CYANIDE

7.9

780.0

16.9 <0.6



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:07

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C210 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11671

PERCENT MOISTURE: 11.5%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.3

292.0

17.5



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:35

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D210 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11677

PERCENT MOISTURE: 5.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

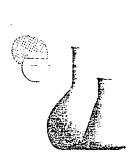
CADMIUM

CHROMIUM

2.9

1.54

15.5





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:07

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C210 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11671

PERCENT MOISTURE: 11.5%

ANALYSIS

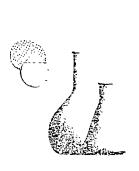
RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 3.3

292.0

17.5





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Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:35

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D210 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11677

PERCENT MOISTURE: 5.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

2.9

1.54

15.5



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Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

TIME COLLECTED:

08/03/00

DATE RECEIVED:

12:38 08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A270 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11660

PERCENT MOISTURE: 14.9%

pН

7.12

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM CHROMIUM 4.5

173.0

17.3

lowell, Laboratory Manager



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CORRECTED LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:18

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C270 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11669

PERCENT MOISTURE: 14.3%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 5.1

1.72

19.5

Suzanne Høwell, Laboratory Manager



Alchem Laboratories, Inc.

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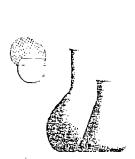
Brad -

when I typed your reports, I accidentally missed changing the lais number on 2270. Here is a corrected report. The data is

correct.

Jennefel

Water, Waste Water and Soll Analysis





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:18

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C270 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11668

PERCENT MOISTURE: 14.3%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 5.1

1.72

19.5



ter



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Water, Waste Water and Soil Analysis

CORRECTED LABORATORY REPORT

JC CORPORATION

ITENTION: KELLY PACKARD

O BOX 4111

OCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

12:18

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

'ROJECT: WILLIAMSON / PO# 6500075090

3OURCE: C270 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11669

PERCENT MOISTURE: 14.3%

ANALYSIS

RESULTS (mg/kg) **Dry Weight**

ENIC MUIN **CHROMIUM**

5.1

1.72

19.5

Suzanne Hawell, Laboratory Manager



Alchem Laboratories, Inc.

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Bud-

when I typed your reports, I accidentally mussed changing the lass a corrected is Water, Waste Water and Soil Analysis



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:42

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D270 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11657

PERCENT MOISTURE: 5.9%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.8

1.73

14.5



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:46

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A330

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11647

PERCENT MOISTURE: 14.3%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM CHROMIUM

5.3

40.69

17.2



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:31

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B330 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11646

PERCENT MOISTURE: 9.2%

ΡH

8.80

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

12.0

20.22

28.3





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:14

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C330

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11648

PERCENT MOISTURE: 12.9%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

4.8

28.83

17.0



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Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:19

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C330-FD MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11659

PERCENT MOISTURE: 12.8%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

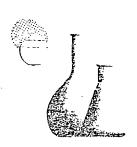
CADMIUM

CHROMIUM

4.8

12.67

17.4





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

D: 08/03/00

TIME COLLECTED:

17:47

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D330 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11661

PERCENT MOISTURE: 5.9%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.3

1.2

16.8



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

14:41

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: A375 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11681

PERCENT MOISTURE: 17.1%

ANALYSIS

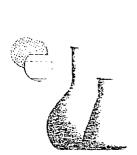
RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 8.1

142.0

34.6





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

14:56

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: B375 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11655

PERCENT MOISTURE: 13.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC CADMIUM CHROMIUM 4.8

689.0

8.5



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:02

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: C375 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

<u>11654</u>

PERCENT MOISTURE: 16.1%

ANALYSIS

RESULTS (mg/kg)

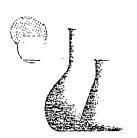
Dry Weight

ARSENIC CADMIUM CHROMIUM 7.9

507.0

10.0







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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

D: 08/03/00

TIME COLLECTED:

9:03

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: D375 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11670

PERCENT MOISTURE: 15.2%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

5.0

841.0

25.6





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

8:55

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: E375 MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11667

PERCENT MOISTURE: 14.9%

ANALYSIS

RESULTS (mg/kg)

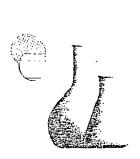
Dry Weight

ARSENIC CADMILIM

CADMIUM CHROMIUM 4.0

260.0

15.8





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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

18:10

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: SWF MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11674

PERCENT MOISTURE: 7.9%

ANALYSIS

RESULTS (mg/kg)

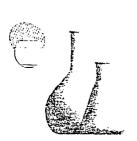
Dry Weight

ARSENIC CADMIUM

CADMIUM CHROMIUM 7.3

604.0

39.3





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:51

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: PUD MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11672

PERCENT MOISTURE: 19.1%

рН

8.53

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM

CHROMIUM

3.1

129.0

10.0



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LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:55

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/23/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: PUD-D MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11673

PERCENT MOISTURE:

pН

18.9%

8.43

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

CADMIUM CHROMIUM

3.5

141.0

91.0



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

- -08/03/2000 DATE COLLECTED -

P.O. BOX 4111 POCATELLO, IDAHO

83205

TIME COLLECTED - - -9:31 DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ1W / TCLP / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

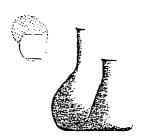
LAB SAMPLE NUMBER - 11682

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.047	08/10/2000	MM
BARIUM	<0.30	08/10/2000	MM
CADMIUM	4.36	08/10/2000	MM
CHROMIUM	0.010	08/10/2000	MM
EAD	< 0.006	08/17/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
<i>∖ ≾ELENIUM</i>	0.029	08/10/2000	MM
SILVER	0.016	08/17/2000	MM

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Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION POCATELLO, IDAHO

- -08/03/2000 DATE COLLECTED -

P.O. BOX 4111

TIME COLLECTED -- -15:45

83205

DATE RECEIVED - - - 08/04/2000 DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ4W / TCLP / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

LAB SAMPLE NUMBER - 11685

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.119	08/17/2000	MM
BARIUM	< 0.30	08/17/2000	MM
CADMIUM	6.45	08/17/2000	MM
CHROMIUM	0.011	08/17/2000	MM
EAD	0.012	08/17/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
ELENIUM	0.109	08/17/2000	MM
SILVER	0.009	08/17/2000	MM

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atory Manager



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LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -15:45

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ4WFS / TCLP / SOIL / PROJ: WILLIAMSON /PN# 33.003.05

LAB SAMPLE NUMBER - 11686

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.107	08/17/2000	MM
BARIUM	< 0.30	08/17/2000	MM
CADMIUM	5.87	08/17/2000	MM
CHROMIUM	0.010	08/17/2000	MM
EAD	0.014	08/17/2000	MM
TRCURY	< 0.0002	08/10/2000	SQ
<i>∟ELENIUM</i>	0.100	08/17/2000	MM
SILVER	<0.006	08/17/2000	MM

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

wzapie Howell, Laboratory Manager





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -17:20

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

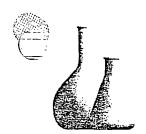
SOURCE -: CZ5W / TCI.P / SOIL / PROJ: WILLIAMSON /PN# 33.003.05

LAB SAMPLE NUMBER - 11687

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.070	08/17/2000	MM
BARIUM	<0.30	08/17/2000	MM
CADMIUM	9.51	08/17/2000	FM
CHROMIUM	0.006	08/17/2000	MM
EAD	0.016	08/17/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
: JELENIUM	0.079	08/17/2000	MM
SILVER	0.039	08/17/2000	MM

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -9:31

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD SUBMITTED: M. LARANGO / B. HA SOURCE -: CZ1W / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

LAB SAMPLE NUMBER - 11688

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

5.93

08/18/2000

SQ

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Suzanne Howell, Laboratory Manager

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AUG 2.2 2000

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LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -11:10

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ2W / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

83205

LAB SAMPLE NUMBER - 11689

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

5.55

08/18/2000

SQ

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Suzanne Howell, Laboratory Manager

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LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -12:35

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD SUBMITTED: M. LARANGO / B. HA SOURCE -: CZ3W / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

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LAB SAMPLE NUMBER - 11690

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

5.57

08/18/2000

SQ

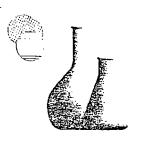
This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Suzanne Howell, Laboratory Manager

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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

DATE COLLECTED - - -08/03/2000

TIME COLLECTED ~ - -15:45

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/21/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ4WFS / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

83205

LAB SAMPLE NUMBER - 11692

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

5.56

08/18/2000

SO

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SUMMIT ENVIRONMENTAL, INC.





104 West 31st Street Boise, Idaho 83714

83205

Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO DATE COLLECTED - -

LECTED - - -08/03/2000

TIME COLLECTED - - -12:35

DATE RECEIVED - - - 08/04/2000 DATE REPORTED - - 08/14/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ3W / TCLP / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

LAB SAMPLE NUMBER - 11684

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYST
MM
MM
·MM
MM
MM
SQ
MM
MM

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83205

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LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

DATE COLLECTED - - -08/03/2000

TIME COLLECTED - - -11:10

DATE RECEIVED - - - 08/04/2000

DATE REPORTED - - - 08/14/2000

ATTENTION: KELLY PACKARD

SUBMITTED : M. LARANGO / B. HA

SOURCE -: CZ2W / TCLP / SOIL / PROJ: WILLIAMSON / PN# 33.003.05

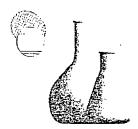
LAB SAMPLE NUMBER - 11683

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	$ extit{RESULTS}$	DATE ANALYZED	ANALYST
ARSENIC	0.059	08/10/2000	MM
BARIUM	< 0.30	08/10/2000	MM
CADMIUM	11.1	08/10/2000	MM
C'HROMI UM	< 0.006	08/10/2000	MM
EAD	0.012	08/10/2000	MM
ERCURY	<0.0002	08/10/2000	SQ
<i>∠ ≤ELENIUM</i>	0.071	08/10/2000	MM
SILVER	0.090	08/10/2000	MM

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104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

15:45

DATE RECEIVED: DATE REPORTED: 08/04/00 08/25/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: CZ4W MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11691

PERCENT MOISTURE: 18.4%

pΗ

5.49

ANALYSIS

RESULTS (mg/kg)

Dry Weight

CYANIDE AMENABLE TO CHLORINE

CYANIDE

<0.6

29.9







104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/03/00

TIME COLLECTED:

17:20

DATE RECEIVED:

08/04/00

DATE REPORTED:

08/25/00

PROJECT: WILLIAMSON / PO# 6500075090

SOURCE: CZ5W MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11693

PERCENT MOISTURE:

nН

15.5% 5.89

ANALYSIS

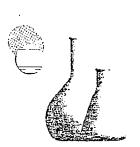
RESULTS (mg/kg)

Dry Weight

CYANIDE AMENABLE TO CHLORINE

CYANIDE

<0.6 19.3



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PHONE #	se	STATE ZIPO	3709	M	ATF	RIX								TE	STS	(CIF	ICLE	METH	OD)					
SAMPLER(S) PROJECT OR SITE	Laran m Son		r 3.05				0		GI SOLVENTS (601 / 8010)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	310)	PESTICIDES (608 / 8081 / 8270)	(81)	TCLP-(DESIGNATE ANALYSIS)	S	D GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	ILS (8270)	OILS (8270) 010)	5 Cr	yanil		NUMBER OF CONTAINERS
	ain of	Custody Form		ac		æ	TPH - 8015 MOD	418.1	(602 / 80)	(601-602	S VOC's (PAH's (8270 / 8310)	CIDES (6	PCB's (608 / 8081)	DESIGN.	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	- LEADE(V+M (8020) 310)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL SOLVENTS (8010)	1 45	7/1	#	BER OF
NUMBER 2000	TIME	SAMPLE IDENTIFICA	TION	WATER	SOIL	ОТНЕЯ	TPH.	TPH - 418.1	מ ב	S S S	GC-M	PAH'S	PESTI	PCB's	TCLP.	8 PCP	RBCA BTEX+	HBCA BTEX+	RBCA BTEX (6	RBCA BTEX (6 CL SOL	3	70	9	∑ N
11645 8/3	920	F30			4	*															X		X	1
11646 8/3	1531	B 330	· .		4																X		X	1
11647 8/3	1546	A 330.			4																_X			1
111.48 8/3	1514	C 330.			4																X			l
11649 8/3	925	E 30.			4																Х			1
11650 8/3	1619	A 30			4																X			1
11651 8/3	1200	B 210			4																X	X	X)
11652 8/3	1110	D301			1					1											X			
11453 8/3	1115	D 150		-	4							-									X			1
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PHONE 377- SAMPLER (S) MICE PROJECT OR SITE WILLIAM	2400 Laran 1502	イノフーフ	929 F 5,05					BTEX (602 / 8020) (+N +M)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	310)	PESTICIDES (608 / 8081 / 8270)	(81)	SEMI-VOLATILES (825 / 8270) TÖLP-(DESIGNATE ANALYSIS)	Sį	D GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	ILS (8270)	1 OILS (8270) 010)		1			NUMBER OF CONTAINERS	
· · · · · · · · · · · · · · · · · · ·	ain of	Custody Form		- E		ОТНЕЯ ТРН - 8015 МОD	TPH - 418.1	x (602 / 80	VOC's (601-602 / 8021)	MS VOC's (PAH's (8270 / 8310)	TICIDES (6	PCB's (608 / 8081)	P-VOLATIL	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	A - LEADE +N+M (8020) (8010)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)		1	#1		IMBER OF	
NUMBER 2000	TIME	SAMPLE IDENTIFIC	ATION	WATER	SOIL	TPH-8	표	BIE	3 8	ပ္ပ်	PA :	PES			8 FR	BTE X	385 303 303	RBC STE	BTEX CL. S		3		-	Į ž	_
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11695 8/3	1145	A 210 - D			4																			1	
11696 8/3	1225	C 270 - D			X																			1	
11697 8/3	1537	B330-D			X		4		bo	6	2													l	
11698 8/3	1000	D30-D			7									_									_ _	1	
11699 \$13	1507	C375-D			X																			1	
11700 8/3	1445	A375-D		↲	X			$/\!\!\!\perp$															_ _	1	
11701 8/3	1630	B30-D	,		X		1	}																1	
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STATE ZII ZI						ATR	15 MOD	TPH - 418.1	BTEX (602 / 8020) (+N+M)	CL. SOLVENTS (601/8010)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8270)	െ	SEMI-VOI ATILES (625 / 8270)	1			RBCA - LEADED GAS THE STEX+N+M (8020), EDB (8011)	<u> </u>	BIEX (8020), PAH (8270) RBCA - MOTOR OILS	(8020), PAH (8270) OLVENTS (8010)	d As Cr	Total Cvanida			NUMBER OF CONTAINERS
	,		SAMPLE IDENTIFICAT	TION	WATER	SOIL	OTHER TPH .	뒫	вте	<u>ا</u> .	Š	S A	HE .	PES	S S	TÖL	8 RC	RBC, BTEX	RBC, BTEX	RBC	RBC	OL. S	J	10		4	⊋
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667	8/3	855	E375			4																	X				1
668	8/3	1012	C30			V																	X				(
الماق	8/3	1218	C270			X																	Х				1
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Received for Laboratory By (Signature)

Date/Time

Relinguished By (Signature)

8/4/00 3:20 pm

Date/Time

Received With Seal Intact? U Yes U No Label Tag, COC Agree? U Yes U No

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PHONE SAMPL PROJE	Mike CTOPISITE Miliar	18e 2900 Lara, 11 500 ain of	FAX' 3 Logo Br Custody	77-29 yal Ha P.N./P.O. NUMB 33,00	3,05			RIX	MOD	TPH - 418.1 BTFX (602 / 8020) (±N ±M)	CL SOLVENTS (601 / 8010)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	PAH'S (8270 / 8310) PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)		TÖLP-(DESIGNATE ANALYSIS)	_		RECA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)		RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL SOLVENTS (8010)		A5 (1r				NUMBER OF CONTAINERS
AB MBER	DATE 2000	TIME	SAMP	LE IDENTIFIC	ATION	WATER	SOIL	OTHER	TPH - 8	TPH - 418.1	SO S	VOC's (GC-MS	PAH'S (PESTIC	PCB's (TCLP-(I	8 RCRA	RBCA -	BTEX+N- EDC (801	ABCA - BTEX (80	BTEX (80 CL SOL)		3	-			Ž
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	SAN PRO	PLER (S) 11/Le. Can UECT OR SITE William	ango son	Brad Harr P.N. / P.O. NUMB 33,003	ER 3 u 5			0	TPH - 418.1	CL. SOLVENTS (601 / 8010)	12 / 8021)	(624/8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270) PCB's (608 / 8081)	SEMI-VOLATILES (625/8270)	TCLP-(DESIGNATE ANALYSIS)	NO LEAD GAS	D GAS), EDB (8011)	JILS 4 (8270)	R OILS 4 (8270) 8010)	1	o Cyanis	Carter Cl.	50/50 >1102	NUMBER OF CONTAINERS
	LAB NUMBEI		ain of	Custody Form SAMPLE IDENTIFICA		WATER	SOIL	TPH - 8015 MOD	TPH - 418.1	CL. SOLVENT	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260) PAH's (8270 / 8310)	HENOLS (60	PESTICIDES (608 / PCB's (608 / 8081)	SEMI-VOLATIL	TCLP-(DESIGNAT	BECA - NO LEAD	TEX+N+M (802C	BTEX+N+M (8020), EDB (8011) EDC (8010)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	ABCA - MOTOR OILS BTEX (8020), PAH (8270) CL SOLVENTS (8010)	177	Ammable	(p# -:	NUMBER OF
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1	11683	8/3	1110	CZZW			{									×;	*							1	۲ #	148
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Alchem Laboratories, Inc.

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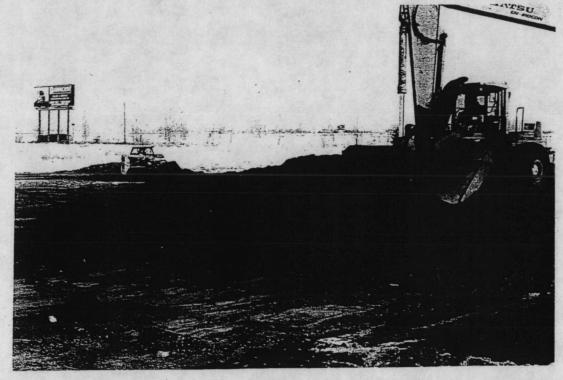
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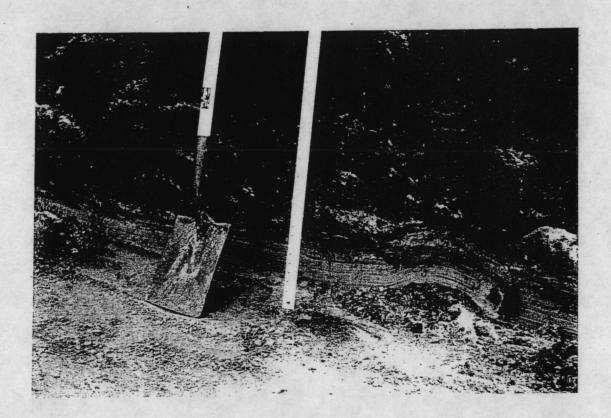
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APPENDIX 5

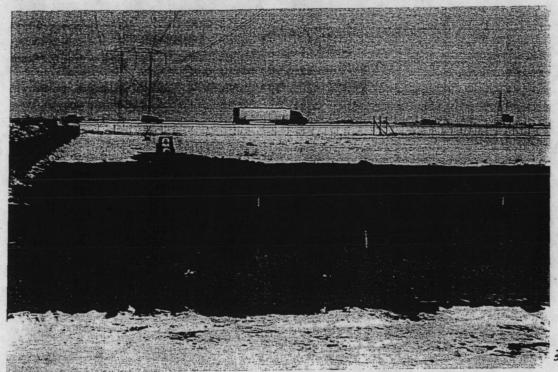
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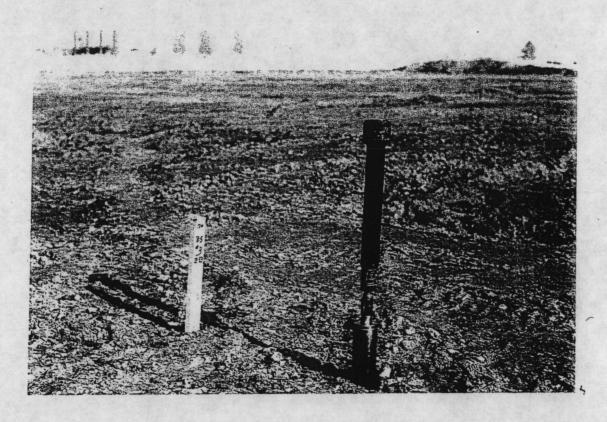
<u>Photograph 1:</u> Excavating "treater dust" and affected soils in North Yard area, November 2000. Trackhoe, bobcat, and loader utilized by Envirocon. Looking northeast.



hotograph 2: Close-up of excavated "treater dust" and soil in affected North Yard area (northwest corner) uring November 2000 excavation work by Envirocon.



Photograph 3: Excavating North Yard area (west side), November 2000. Note wood stakes marking November 2000 sampling point grids. Looking north.



<u>hotograph 4:</u> Sample point grid marker and soil probe sampler during November 2000 sampling. Specific core location identified randomly by standing at stake, facing north, and dropping a rock over left shoulder. Looking northeast.

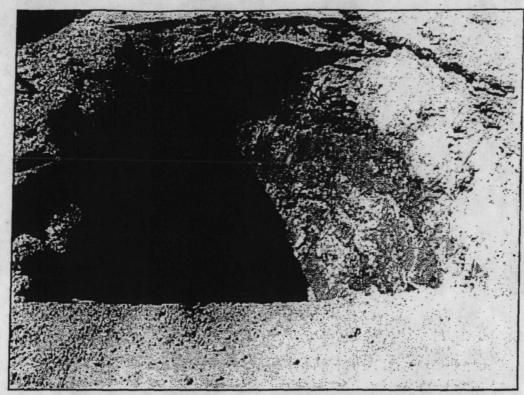


Photograph 5: Looking east at soil excavation on North Yard area (south side), August 2001.

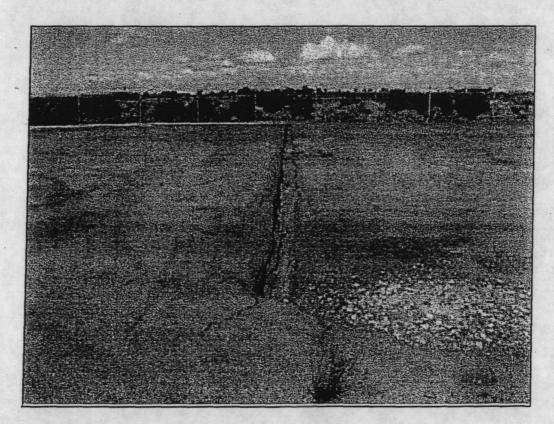


hotograph 6: Excavated frontage area along right-of-way south of property southwest fence line, August 2001.

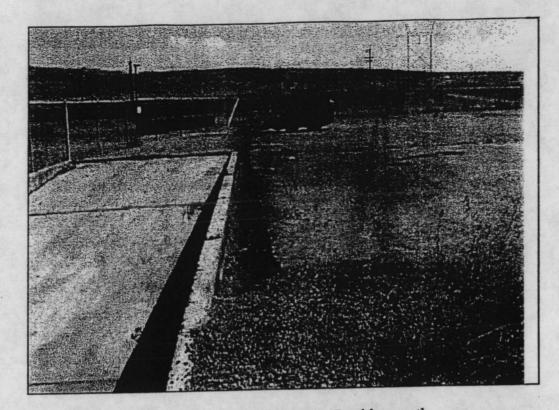
Looking west.



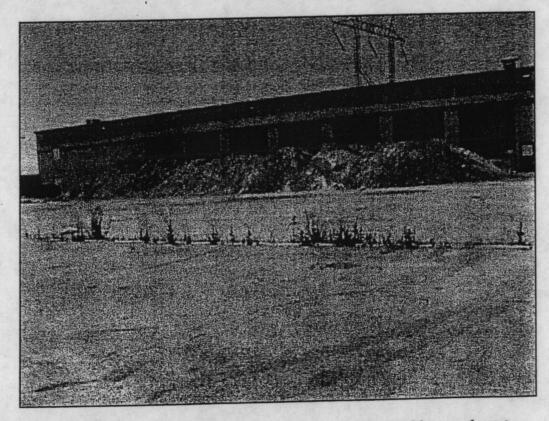
Photograph 7: Excavated dry well and adjacent soil on west side of building, August 2001.



notograph 8: Hand excavated west side trench, August 2001. Looking west.



Photograph 9: Hand excavated south side trench, August 2001. Looking south.



Photograph 10: Stock piled soils on east side of building, August 2001. Looking southwest.

APPENDIX 6

Soil Remediation Closure Sampling and Analysis
Plan
Site Safety Plan





Rob Hartman

August 7, 2001

Astaris Environmental Department
P.O. Box 4111
Pocatello, ID 83205

Re: Soil Remediation Closure Sampling and Analysis Plan

Williamson Site, Pocatello, Idaho Summit Project No. 33.003.06

Dear Mr. Hartman:

Summit Environmental Inc. has reviewed the Williamsen site background information and the available remediation soil sampling results. Typical closure sampling for a site this size would require approximately 59 soil samples. Field splits, duplicates and equipment decontamination samples will add 10 to 15 more samples, for a total of approximately 70 to 75 samples.

Background

The property was formerly a truck repair facility and had been leased to a business that recycled process waste from various local industries. The former lessee is known to have abandoned some waste material at the facility. The site history and pervious owner's practices are documented in other environmental site reports, however, the true and complete operating history of the site is unknown.

FMC purchased the site in the Winter of 1999 and FMC has not conducted any operations at the facility. During the Spring of 2000, FMC decommissioned two abandoned petroleum underground storage tanks and removed numerous abandoned containers of hazardous material. In August of 2000, FMC conducted soil and waste material sampling for metals and cyanide. Several site areas were found to have cadmium levels above desired concentrations. Waste and soil removal actions were conducted in November of 2000 and July of 2001.

All visible precipitator dust has been removed from the North Yard Area, fence lines, and asphalt trenches. Site areas where sampling documented soil cadmium concentrations greater that 400 mg/kg were remediated through removal. Over 3000 cubic yards of precipitator dust and cadmium contaminated soil were removed for treatment at an off-site RCRA TSD Facility.





Site Closure Objective

Future site use is anticipated to be heavy equipment and/or plant material storage. There are no current plans to occupy or staff the facility with employees. Since the FMC Pocatello site specific industrial cleanup concentration for cadmium is 448 mg/kg, this criteria was also selected for the Williamsen site. If cadmium soil concentrations are below 448 mg/kg, other metals are not an exposure problem based upon prior Williamsen site sampling. Therefore, cadmium will be the contaminant of concern.

The simple exceedence rule will be used to determine whether the site attains the cleanup standard. To implement this method, at least 59 discrete soil samples will be acquired and zero measurements will be allowed to exceed the cleanup standards.

Approximately 87,050 square feet of the site has been remediated. The selected sample size and evaluation criteria will verify that 95 % of the site is below the cleanup standard; keeping the chance of saying the site is clean when it is dirty at 5 %. (no exceedances, false positive rate of 95 % that 95 % of the site is less than the cleanup standard; Table 7.1 in Methods for Evaluating the Attainment of Cleanup Standards; US EPA Feb. 1989).

Closure Sampling and Analysis Methodology

For closure sampling purposes, the remediated area will be divided into two Stratum. Stratum 1, the North Yard Area, contains 92 % of the site remediation area. Fifty-five six inch soil core samples will be collected on a systematic grid with samples 38 feet apart. The remediated fence line and trenches will be considered Stratum 2 and four random samples will be located along the fence lines and one random sample will be collected from a trench, for a total of 5 samples in Stratum 2. Stratum two contains 8% of the remediated area.

The each six-inch soil core will be opened, the soil mixed, and placed in a properly labeled glass jar with grid coordinates, date, and time of collection. Samples will be managed under chain of custody at all times. Sampling equipment will be decontaminated with soap and DI water and rinsed with clean DI water prior to initial use and between samples. Summit Standard Operating Procedures will be utilized while performing the routine field activities. Applicable SOPs are attached.

QA/QC samples will be include two field splits, two field duplicates, two equipment decontamination blanks and one water trip blank. Any corrective actions will be handled in accordance with Summits QA/QA Plan.

A fixed laboratory will be used to analyze the samples collected during the closure sampling event. Alchem Laboratories of Boise, Idaho will likely be used. All analysis will be through methods specified in USEPA SW 846. The Alchem QA/QC Plan is



attached. Method accuracy and precision will be as specified in SW 846 for soil samples. Data Quality Level III is desired for this project and 95% data completeness is targeted to meet closure objectives.

Personnel Health and Safety

Site Specific Health and Safety procedures for Summit personnel are addressed in Summit's Health and Safety Plan. The Plan will be available on-site and will be reviewed with site personnel each day.

Thank you for this opportunity to assist Astaris on this project. If you have any questions are need further information, please call.

Sincerely

Bradley Harr, MS, CHMM Sr. Environmental Scientist Title:

Soil Data, Collecting a Representative Subsurface Soil Sample with Augers and

Thin-Wall Tube Samplers

Abstract:

A standard procedure is required for collecting a representative soil sample from a plot, test area, or field. It is very important that the sample accurately represent conditions in the area of concern.

- I. If possible, obtain an accurate plot of the area that will be sampled.
- II. Mark sampling locations with flags or other appropriate markers.
- III. Ensure that any buried pipelines, overhead power lines, or other utilities are located and approval has been obtained from proper authorities before proceeding with any rig set-up.
- IV. Record all sampling locations on appropriate record forms.

Subsurface Soil Sampling with Hand Auger

- I. Attach the cleaned auger bit to a rod extension and attach the "T" handle to the drill rod.
- II. Clear the area to be sampled of any surface debris (e.g. twigs, rocks, litter). It may be advisable to remove the first 3 to 6 inches of surface soil for an area approximately 6 inches in radius around the drilling site.
- III. Begin augering, periodically removing and depositing accumulated soils onto a plastic sheet spread near the hole.
- IV. Slowly remove the auger from the boring after reaching the desired depth. When sampling from the auger, collect sample from the bottom of the auger. Specific decontamination procedures should be designed for the particular sampling event if this method of sample collection is chosen.
- V. If sampling with a thin wall tube sampler, remove the auger tip from the extension rods and replace with a pre-cleaned thin-wall tube sampler. Install the proper cutting tip.
- VI. Carefully lower the tube sampler down the borehole. Gradually force the tube sampler into the soil. Take care to avoid scraping the walls of the borehole. Avoid hammering the drill rods to facilitate coring as the vibrations may cause the borehole walls to collapse.
- VII. Remove the tube sampler and unscrew the extension rods.
- VIII. Remove the cutting tip and the core from the device.
- IX. Discard the top of the core (approx. 1 inch) and using a clean implement, place the remaining core into the appropriate labeled sampling containers. Sample homogenization is not required unless specified in the project plan.
- X. If volatile organic analysis is to be performed, transfer a portion of the sample directly into an appropriate, labeled sample container(s) with a stainless steel lab spoon or equivalent. Secure the cap(s) tightly maintaining a zero (0) headspace.
- XI. If another sample is to be collected in the same borehole but at a greater depth, reattach the auger bit to the extension rods and assemble. Follow the appropriate steps to decontaminate the auger and the tube sampler between samples.
- XII. Pack and ship samples according to standard operating procedures.
- XIII. Properly abandon the borehole with acceptable backfill material. The removed soil material is usually acceptable unless otherwise specified in the project plan.



}

<u>Title</u>: Soil Data, Decontaminating Soil Sampling Equipment

Standard Operating Procedures

Abstract: A standard procedure is required for decontaminating soil sampling equipment so

that representative soil samples can be collected from a plot, test area, or field. It is very important that the sample accurately represent conditions in the area of

concern.

I. Remove large soil particles from the equipment using a metal or nylon scrub brush and TSP detergent.

- II. Wash equipment with a non-phosphate detergent solution.
- III. Rinse equipment with tap water.
- IV. Rinse equipment with distilled/deionized water.
- V. Rinse with 10% nitric acid if the sample will be analyzed for trace metals.
- VI. Rinse with distilled/deionized water.
- VII. Rinse equipment with pesticide grade acetone of a two solvent or either isopropyl alcohol or methanol followed by a hexane rinse, if the sample will be analyzed for organics.

 Collect hexane rinse in a separate container for proper disposal away from the site.
- VIII. Air dry equipment completely.
- IX. Rinse equipment with distilled/deionized water. Collect distilled water rinse in a separate container for proper disposal away from the sample site.
- X. Collect the rinsate sample from the last rinse for analysis in the laboratory to determine the adequacy of the decontamination procedures. Decontaminated sampling equipment, particularly auger heads and sample collection devices, should be properly stored prior to use, e.g. wrapped with aluminum foil (except for metals).





<u>Title</u>: Soil Data, Collecting a Representative Surface Soil Sample

Standard Operating Procedures

Abstract: A standard procedure is required for collecting a representative soil sample from a

plot, test area, or field. It is very important that the sample accurately represent

conditions in the area of concern.

I. If possible, obtain an accurate plot of the area that will be sampled.

II. Mark sampling locations with flags or other appropriate markers.

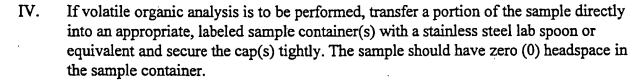
III. Record all sampling locations on appropriate record forms.

Surfacing Soil Sampling

I. Decontaminate soil sampling equipment according to standard operating procedures.

II. Carefully remove the top layer of soil or debris to the desired sample depth with a precleaned spade.

III. Using a pre-cleaned, stainless steel scoop or towel, remove and discard a thin layer of soil from the area which came in contact with the spade.



V. Place the sample into an appropriate, labeled container(s) and secure the cap(s) tightly. If composite samples are to be collected, place a sample from another sampling interval into the homogenization container, usually a stainless steel bowl, ans mix thoroughly. It is an inappropriate technique to homogenize/composite samples for subsequent analysis for volatile organic compounds. When compositing is complete, place the sample into appropriate labeled container(s) and secure the cap(s) tightly.



Title:

Ground Water and Soils Data, Shipping Samples

Standard Operating Procedures

Abstract:

A standard procedure is required for shipping ground water and soil samples to a laboratory for chemical analysis. It is very important that the samples be properly secured and preserved for shipment and that the proper documentation for custody

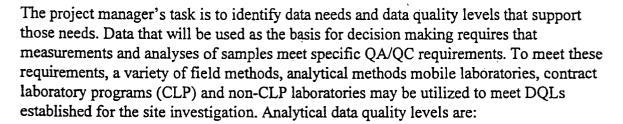
for the samples is documented as needed.

- I. Samples shall be placed in containers deemed suitable by the U.S. Environmental Protection Agency (U.S. EPA). Typically, plastic or metal ice coolers are sufficient.
- II. Samples shall be chilled ans acidified to maintain the U.S. EPA's requirements for sample holding times. These requirements vary depending upon the analyte of concern. Refer to the Appendix six to determine appropriate preservation methods.
- III. Samples shall be placed in rigid coolers with ice, ice packs, or other needed media to maintain the sample integrity and holding temperatures.
- IV. Samples shall be properly labeled at the time of collection so that sites and analytes of concern can be identified for data storage and analysis.
- V. Samples shall be packed in the coolers of other appropriate containers to prevent breakage of the sample containers.
- VI. Each cooler shall have a sample inventory sheet placed in a sealed plastic bag and attached to the inside of the container lid. The sample inventory sheet lists the sample container numbers that are enclosed in the cooler, the collector of the samples, the shipper of the samples, and the receiver of the shipment. A chain of custody form, if necessary, may be included with the sample inventory sheet.
- VII. If the samples are shipped through a commercial shipper (bus, air, etc.) then the person offering the package for shipment is responsible for making sure that the packaging and labeling comply with either U.S. DOT or IATA shipping regulations and rules.

Typically, samples should be placed in two large plastic bags (double bagged) inside the cooler. Void spaces in the cooler are filled with packing material or an air bag may be made using additional plastic bags. The cooler is closed and secured with two wraps of strapping tape. Be sure all cooler drain parts are closed and secure. Label the top of the cooler with proper shipping addresses and make "limited environmental samples" and "caution" on two sides of the container.



Data Quality Levels



Level I Field screening or analysis using portable instruments, e.g., a Hach kit. Results are often not compound specific and not quantitative, but, results are available in real time.

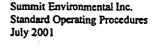
Level II Field analysis using more sophisticated portable analytical instruments; in some cases, the instruments may be set up in a mobile or on-site laboratory. There is a wide range in the quality of data that can be generated. Quality depends on use of suitable calibration standards, reference materials, sampl preparation, equipment, and training of operator. Results are available in real time or several hours.

Level III All analyses performed in an off-site analytical laboratory using standard, documented procedures. The laboratory may or may not be a CLP laboratory.

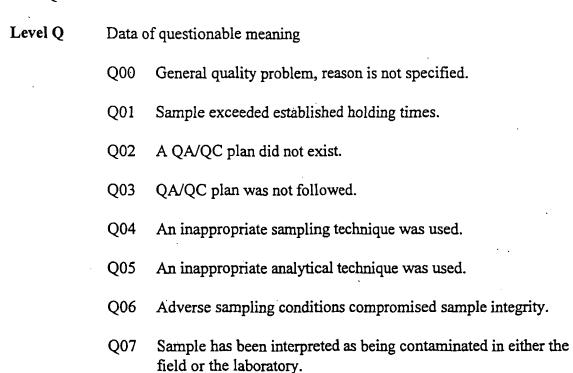
Level IV CLP routine analytical services (RAS). All analyses are performed in an off-site CLP analytical laboratory following CLP protocols including extensive QA/QC documentation.

Level V Special Analytical Services (SAS). This program is designed to compliment the RAS program by providing specialized or custom analytical requirements on an as-needed basis by a specific subcontract that meets the specialized requirements.

It should be noted that an additional data quality level may be assigned by the QA/QC Review Committee to data that cannot be classified as Level I through V. Level Q is reserved for data which have questionable meaning because of problems or uncertainties. A two digit numeric code will be included with the Q designation that reflects the reason for the data to be classified as questionable. Examples of data which might be assigned to



level Q are:



Q08 Sample data have been interpreted as either field or lab error.

This scheme allows for the addition of more "Q" levels as reasons for qualifying data as questionable develop. The topics listed above have not been ordered according to any particular scheme; this is a tentative listing as of February 11, 1992.

In all of these example situations, data exist and should no be discarded. But the data quality level assignment of Q alerts the user to problems associated with validity of the data.

There may also be data which may be available from historic sources or from sources where the quality of the data can not be verified. These data should be listed as Level N.

Level N Data are historical or have not be reviewed. These data may be accurate but the quality levels are generally unknown.



QUALITY ASSURANCE PROJECT PLAN

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 PROJECT ORGANIZATION	1
3.0 DATA MANAGEMENT QUALITY ASSURANCE OBJECTIVES	2
	3
3.2 Accuracy	3
3.3 Representativeness	3
3.4 Completeness	4
3.5 Comparability	4
3.6 Level III Documentation	4
4.0 SAMPLING PROCEDURES	5
4.1 Sample Containers	6
4.2 Sample Preservation and Holding Times	6
5.0 SAMPLE AND DOCUMENT CUSTODY PROCEDURES	6
5.1 Field Chain-of-Custody Procedures	6
5.2 Field Sampling Operations	7
5.3 Laboratory Operations	7
5.4 Corrections to Documentation	8
6.0 EQUIPMENT CALIBRATION PROCEDURES AND FREQUENCY	8
7.0 ANALYTICAL PROCEDURES	9
8.0 DATA REDUCTION, VALIDATION, AND REPORTING	9
9.0 DATA MEASUREMENT ASSESSMENT PROCEDURES	9
9.1 Precision	10
9.2 Accuracy	10
	11
10.0 CORRECTIVE ACTIONS	11
LIST OF TABLES	
Table 1 - Precision and Accuracy Objectives for Groundwater Sample Analyses Table 2 - Precision and Accuracy Objectives for Soil Sample Analyses Table 3 - Preservation and Holding Times for Groundwater Sample Analyses Table 4 - Preservation and Holding Times for Soil Sample Analyses Table 5 - Analytical Methods and Method Detection Limits for Groundwater Table 6 - Analytical Methods and Method Detection Limits for Soil	

QUALITY ASSURANCE PROJECT PLAN

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) has been prepared voluntarily pursuant to FMC's soil closure sampling at the Williamsen site in Pocatello, Idaho.

The purpose of the QAPP is to specify procedures and methods for office and field documentation, sample handling and custody, record keeping, equipment handling, laboratory analyses that will be used during the post remediation soil sampling at the Williamsen site.

This QAPP was developed in conjunction with and is supplemented and accompanied by other documents. These documents were prepared according to applicable EPA guidelines. Accompanying documents include:

- Injection Well Closure Plan. A document that presents the scope of work (objectives and approach), a master schedule, and a list of deliverables for the proper closure of the dry well.
- Sampling and Analysis Plan (SAP). A detailed description of proposed field activities and sampling equipment, frequencies of sample collection, sampling locations and depth, and other relevant procedures. The SAP complements the QAPP, and the two documents frequently refer to each other.
 - used in the field to protect field personnel and the general public from potential hazards that remediation activities may present.

2.0 PROJECT ORGANIZATION

Primary responsibility for project will rest with the Summit Environmental, Inc.'s Project Manager (PM). The Quality Assurance Manager (QAM) will provide independent quality assurance review.



When quality assurance problems or deficiencies requiring special action arise, the PM will identify the appropriate corrective action to be initiated and implemented. The QAM will be informed of quality assurance problems that require special expertise not provided by or available to the project team.

The PM will be responsible for all the Remedial Action and Closure Sampling work elements involved with the site. This work will include field studies (i.e., soil investigations), data base management, field and laboratory testing, and data analysis.

3.0 DATA MANAGEMENT QUALITY ASSURANCE OBJECTIVES

The general Quality Assurance (QA) objectives for this project are to develop and implement procedures for obtaining and evaluating data of a specified quality that can be used to direct remedial activities. In order to collect such information, analytical data will have an appropriate degree of accuracy and reproducibility, samples collected will be representative of actual field conditions, and samples will be collected and analyzed using proper chain-of-custody procedure.

The QA objectives also include obtaining data appropriate for evaluating potential site risks. Thus, method detection limits and the analytical results will be compared to existing cleanup level for each parameter in the media of concern. The detection limits listed in the QAPP are the expected detection limits based upon laboratory calculations and experience.

Specific QA objectives are as follows:

- 1. Establish sampling techniques so that the analytical data are representative of the media (i.e., soils or groundwater) being measured.
- 2. Collect and analyze a sufficient number of duplicate field samples to establish sampling precision. Field duplicate samples will be used to establish precision among replicate samples collected from the same sample location.
- 3. Analyze a sufficient number of duplicate samples to assess the performance of the analytical laboratory(ies).
- 4. Collect and analyze a sufficient number of travel blank and equipment blank samples to evaluate the potential for contamination from sampling equipment and techniques and/or transportation.



Precision, accuracy, representatives, completeness, and comparability parameters used to indicate data quality are defined in the following subsections.



3.1 Precision

Precision is a measure of the reproducibility of data under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For duplicate measurements, precision can be expressed as the relative percent difference (RPD). Analysis of field duplicate samples will serve to measure the precision of sampling. Field and laboratory duplicate measurements will be carried out at a 10-percent frequency for each sample matrix. The precision objectives for the parameters to be analyzed are shown in Tables 1 and 2.

3.2 Accuracy

Accuracy is the measure of error between the reported test results and the true sample concentration. In so much as true sample concentration is not known, accuracy is usually inferred from recovery data from spiked samples.

Because of difficulties with spiking samples in the field, the laboratory will spike samples. The laboratory shall perform one spiked sample analysis (matrix spike) and one duplicate spiked sample (matrix spike duplicate) at a frequency of ten percent for samples of a similar matrix (water or soil).

Perfect accuracy is 100 percent recovery; the accuracy objectives for the parameters of interest to this project are shown in Tables 1 and 2.

3.3 Representativeness

Representativeness is a measure of how closely the results reflect the actual concentration of the chemical parameters in the medium sampled.

Sampling procedures, as well as sample-handling protocols for storage, preservation, and transportation have been designed to preserve the representativeness of the samples collected. Proper documentation will establish that protocols have been followed and sample identification and integrity assured.

Equipment blanks will be collected once for each sampling method to assess field decontamination procedures. Travel blanks will be used to assess the potential for cross contamination by volatile organic compounds during transportation. A travel blank will be included in each shipping container that contains two or more samples to be analyzed for VOCs. Laboratory method blanks will be run once per day.



3.4 Completeness

Completeness is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is essentially the same for all data uses: that a sufficient amount of valid data be generated.

3.5 Comparability

The objective of this parameter is to assure that the data developed during the investigation are directly comparable.

Comparability of the data will be maintained by using EPA-defined procedures. The compounds, analytical methods, and target detection limits for this project are discussed in Section 7.0. Actual detection limits may vary during analysis depending on the nature of the particular sample. Variances in detection limits will be reported by the laboratory.

3.6 Level III Documentation

Level III documentation will consist of the following:

- Holding Times
- Travel Blank Data
- Equipment Blank Data
- Field Duplicate Data
- Field Blank Data
- Laboratory Method Blank Data
- Sample Data
- Matrix Spike Data
- Surrogate Spike Data
- Duplicate Sample Data
- Laboratory Control Data

4.0 SAMPLING PROCEDURES

Sampling procedures for soils are presented in the SAP.

These procedures are designed to ensure that (1) all samples collected at the site are consistent with project objectives, and (2) samples are identified, handled, and transported in a manner such that the data are representative of the actual site conditions and that information is not lost in sample transferral. The data collected will ultimately be used to determine the extent and nature of contamination at the site in support of subsequent site activities including closure.

Quality assurance objectives for sample collection will be accomplished by a combination of the following items:

- **Duplicate Samples.** Duplicates will be submitted to evaluate the precision, the number of field duplicates required for this project will be 10 percent of the total of each sample parameter.
- Blank Samples. An equipment blank consisting of deionized water will be collected for each type of sampling method for each day sampling activities occur. One travel blank consisting of deionized water will be collected and carried through the sample handling and analyses procedures. A travel blank consisting of organic free water will be included in each shipping container containing two or more samples to be analyzed for BTEX.
- Chain-of-Custody. Described in Section 5.0.
- Laboratory QA Analytical procedures will be evaluated by analyzing reagent or method blank; spiked, duplicate, and check standard samples per CLP Protocols.

4.1 Sample Containers

Sample containers to be used for the various media to be sampled during this project are described in the SAP.

4.2 Sample Preservation and Holding Times

In the field, the samples will be kept in a iced cooler until transportation to the laboratory. Tables 3 and 4 summarize the sample preservation and holding time protocols.

5.0 Sample and Document Custody Procedures



The various methods used to document field sample collection and laboratory operation are presented below in the indicted section:

- 5.1 Field Chain-of Custody
- 5.2 Field Sampling Operations
- 5.3 Laboratory Operations
- 5.4 Correction to Documents

5.1 Field Chain-of-Custody Procedures

Sample custody refers to the process of tracking the possession of a sample from the time it is collected in the field through laboratory analysis. A sample is considered to be under a person's custody if:

- It is in a person's physical possession.
- In view of the person after he has taken possession.
- Secured by that person so that no one can tamper with the sample, or secured by that person in an area which is restricted to authorized personnel.

A chain-of-custody form is used to record possession of a sample and to document analyses requested. Each time the sample bottles or samples are transferred between individuals, both the sender and receiver sign and date the chain-of-custody form. When a sample shipment is transported to the laboratory, a copy of the chain-of-custody form is included in the transport container.

The chain-of-custody forms are used to record the following information:

- Sample identification
- Sample collector's signature
- Date and time of collection
- Description of sample
- Shipper's name and address

- Receiver's name and address
- Signatures of persons involved in chain-of-custody
- Inclusive dates and times of possession
- Analyses requested

5.2 Field Sampling Operations

Procedures for handling, documenting, and shipping of samples are described in the SAP.

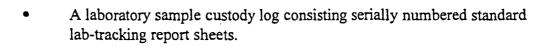
5.3 Laboratory Operations

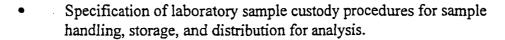
The laboratories which will analyze samples have systems in place for documenting the following laboratory information:

- Calibration procedures
- Analytical procedures
- Computational procedures
- Quality control procedures
- Bench Data
- Operating procedures, or any changes to these procedures
- Laboratory notebook policy

Laboratory chain-of-custody procedures provide the following:

• Identification of the responsible party (sample custodian) authorized to sign for incoming field samples, obtain documents of shipment (bill of lading number or mail receipt), and verify the data entered onto the sample custody records.





5.4 Corrections to Documentation

All original data recorded in field notes, chain-of-custody records, and other forms are written with waterproof ink. None of these documents will be destroyed or thrown away, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document, the individual making the entry will correct the document by crossing a line through the error and entering the correct information. Any subsequent error discovered on a document is corrected, initialed, and dated by the person who made the entry.

6.0 EQUIPMENT CALIBRATION PROCEDURES AND FREQUENCY

All instruments and equipment used during this project will be operated, calibrated, and maintained according to the manufacturer's guidelines and recommendations.

Operation, calibration, and maintenance will be performed by personnel who have been properly trained in these procedures.

7.0 ANALYTICAL PROCEDURES

Soil samples will be analyzed using Level III analytical protocol for the parameters identified in the Work Plan. The procedures that will be used for their analysis, and the method detection limits (MDL) are listed on Table 5. The soil analytical parameters are shown in Table 6. The MDL's shown are those to be expected when no interfering components are present in the sample.

8.0 DATA REDUCTION, VALIDATION, AND REPORTING

Raw data generated in the field from project sampling tasks and used in the project reports will be appropriately identified and will be included as an appendix to the project reports.

The Project Quality Control Coordinator will validate analytical data. Laboratories generating analytical data for this project will be required to submit results that are supported by sufficient backup and quality assurance/quality control (QA/QC) data to enable the reviewer to conclusively determine the quality of the data. Validity of laboratory data will be determined based on the objectives outlined in Section 3.0, Quality Assurance Objectives, and Section 9.0. Data Assessment Procedures. Data





validity will also be determined based upon the sampling procedures and documentation outlined in Sections 4.0 and 5.0 of this QAPP. Data included in the Closure Plan will be QA/QC reviewed.

All data will be stored and maintained according to the standard procedures of the laboratories. Where test data have been reduced, the method of reduction will be described in the report.

9.0 DATA MEASUREMENT ASSESSMENT PROCEDURES

The quality of the data will be assessed based on precision, accuracy, and completeness. Procedures to compute each are presented in the indicated section.

- 9.1 Precision
- 9.2 Accuracy
- 9.3 Completeness

9.1 Precision

The relative percent difference (RPD) is used to access the precision of the analytical method and is calculated using the following equation:

$$\mathbf{RPD} = \frac{|X\mathbf{s} - X\mathbf{d}|}{(X\mathbf{s} + X\mathbf{d})/2} \times 100 \qquad \text{Equation 1}$$

where:

Xs = analytical result in mg/kg of sample

Xd = analytical result in mg/kg of duplicate sample

9.2 Accuracy

The accuracy of the data set is determined from the analysis of spiked samples. The accuracy is calculated using the following equation:

$$A = \frac{(Xss - Xs)}{T} \quad X \quad 100 \quad \text{Equation 2}$$

where:

A = % recovery for the added spiked

Xss = analytical result in mg/kg obtained from the spiked sample

Xs = analytical result in mg/kg obtained for the sample

T = true value of the added spike in mg/kg.

The overall accuracy is the arithmetic mean of all the spiked samples.

9.3 Completeness

Completeness of the data is determined by the following equation.

10.0 CORRECTIVE ACTIONS

If the quality control audit detects unacceptable conditions or the data, Summit Environmental's Project Manager will be responsible for developing and initiating corrective action. The Quality Assurance Manager will be notified if the nonconformance is significant or requires special expertise. Corrective action may include the following:

- Reanalyzing the samples, if holding time criteria permit.
- Resampling and analyzing.
- Evaluation and amending sampling and analytical procedures.
- Accepting data and acknowledging level of uncertainty or inaccuracy by flagging the data.

TABLE 1

PRECISION AND ACCURACY OBJECTIVES
FOR GROUNDWATER SAMPLE ANALYSES

Parameter	EPA Method	Precision (RPD)	Accuracy (%)
Volatile Organic Compounds			
Benzene	8020	<+/-25	76-125
Ethylbenzene	8020	<+/-25	76-125
Toluene	8020	<+/-25	76-125
Xylenes	8020	<+/-25	76-125
ТРН	418.1	<+/-10	90-110

TABLE 2
PRECISION AND ACCURACY OBJECTIVES
FOR SOIL SAMPLE ANALYSES

Parameter	EPA Method	Precision (RPD)	Accuracy (%)
Volatile Organic Compounds			
Benzene	8020	<+/-25	76-125
Ethylbenzene	8020	<+/-25	76-125
Toluene	8020	<+/-25	76-125
Xylenes	8020	<+/-25	76-125
PAHS			
Acenaphthylene	8310	20	33-116
Phenaphthylene	8310	35	20-154
Pyrene	8310	34	20-147
Benzo(k)fluoranthene	8310	34	25-144
Dibenzo(a,h)anthracene	8310	33	20-128
Metals		•	
Lead	6010	<+/-15	80-110
Cadmium	6010	<+/-15	80-110
Chromium	6010	<+/-15	80-110
Petroleum Hydrocarbons		,	
TPH-G	DEQ Method	<+/-20	80-120
TPH	418.1	<+/-20	80-120

TABLE 3

PRESERVATIVES AND HOLDING TIMES
FOR GROUNDWATER SAMPLE ANALYSES

Parameter	EPA Method	Preservative	Holding Time
BTEX	8020	HCI	14 days
ТРН	418.1	HCI	14 days

TABLE 4

PRESERVATIVES AND HOLDING TIMES
FOR SOIL SAMPLE ANALYSES

Parameter	EPA Method	Preservative	Holding Time
BTEX	8020	Ice	14 days
ТРН	418.1	Ice /	14 days
ТРН-С	DEQ Method	Ice	14 days
PAHs	8310	Ice	14 days
Metals	6010	Ice	6 months

TABLE 5

ANALYTICAL METHODS AND METHOD DETECTION LIMITS
FOR GROUNDWATER

Parameter	Analytical Method	Method Detection Limit
Volatile Organic Fraction		
Benzene	8020	2.0 ppb
Ethylbenzene	8020	2.0 ppb
Toluene	8020	2.0 ppb
Xylenes	8020	2.0 ppb
Total Petroleum Hydrocarbons	EPA 418.1	0.04 ppm

TABLE 6

ANALYTICAL METHODS AND METHOD DETECTION LIMITS FOR SOIL

Parameter Analytical Method		Method Detection Limit		
Volatile Organic Fraction				
Benzene	EPA 8020 2.0 ppb			
Ethylbenzene	EPA 8020	2.0 ppb		
Toluene	EPA 8020	2.0 ppb		
Xylenes	EPA 8020	2.0 ppb		
Total Petroleum Hydrocarbons	(
TPH-G	DEQ Method	10 ppm		
TPH	EPA 418.1	2.5 ppm		
TPH-Field	EPA 418.1	50 ppm		
Polynuclear Aromatic Hydroca	rbons EPA 8310	0.083 ppm		
Naphthalene		0.17 ppm		
Acenaphthylene	·	0.17 ppm		
Acenaphthene		0.017 ppm		
Fluorene		0.0083 ppm		
Phenanthrene		0.0083 ppm		
Anthracene		0.017 ppm		
Fluoranthene		0.017 ppm		
Pyrene		0.017 ppm		
Benzo(A)pyrene		0.017 ppm		
Chrysene		0.017 ppm		
Benzo(b)fluoranthene		0.017 ppm		
Benzo(k)fluoranthene	,	0.017 ppm		
Benzo(a)pyrene		0.017 ppm		
Dibenzo(a,h)anthracene	e	0.034 ppm		
Benzene EPA 8020 Ethylbenzene EPA 8020 Toluene EPA 8020 Xylenes EPA 8020 Total Petroleum Hydrocarbons TPH-G DEQ Method TPH EPA 418.1 TPH-Field EPA 418.1 Polynuclear Aromatic Hydrocarbons EPA 8310 Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(A)pyrene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene		0.017 ppm		
Indeno(1,2,3-cd)pyreno	•	0.017 ppm		
Metals		•		
Cadmium	EPA 6010	0.35 ppm		
Chromium	EPA 6010	0.3 ppm		
Lead	EPA 6010	4.2 ppm		

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SUMMIT ENVIRONMENTAL, INC. Phase 2 Environmental Site Characterization SITE SAFETY PLAN

Project No. <u>33.003.05</u>

Plan Prepared by:___

Date:__

Plan Approved by

Date

1.0 GENERAL INFORMATION

Project:

FMC Corporation, Pocatello, Idaho

Project Members:

Brad Harr

Williamson Site Characterization

Mike Larango

Client:

FMC Corporation, Pocatello, Idaho

Site Location:

Highway 30 - West of the FMC plant, Pocatello, Idaho

Facility Description: Williamson Site - fenced abandoned industrial site with one large building.

Client Contacts:

-Mr. Doug Bement - FMC

Phone #. 208-236-8267

Mr. Rob Hartman - FMC

Phone #: 208-236-8212

Project Manager:

Brad Harr

Scope of Work:

Summit will provide all necessary labor and supplies to collect approximately 100 discrete soil samples for select heavy metal analysis at the Williamson site. It is anticipated that cadmium will be the primary contaminant of concern. Composite and grab samples of potential waste material will be collected to determine waste classification for management/disposal. Five to ten percent of the samples will be for QA/QC analysis to ensure verifiable data quality. A project letter report will be prepared which summarizes field procedures and laboratory results. Recommendations will be made for corrective actions and waste management, if needed.

2.0 SITE CHARACTERISTICS

2.1 Topography: Site is relatively flat consisting of asphalt and concrete surfaces.

2.2 Surrounding Population:

<25,000

2.3 Season/Weather Conditions:

Summer - Warm to Hot Temperatures



ENVIRONMENTAL SERVICES

2.4 Possible Materials to be Encountered: Soil contaminated with heavy metals, primarily cadmium. Other unknown possible hazardous materials left by

past owner, sodium cyanide, paints,

batteries, grease

2.5 Characteristics of Materials: . Toxic / Corrosive

2.6 Unusual Features Buried utilities and the possible

of unknown hazardous discovery

materials.

Site Status:

Inactive

2.8 History: The site was formerly a truck repair facility and had been leased to a business that recycled process waste from various local industries. The former lessee is known to have abandoned some waste material at the site. The complete operating history of the site is

unknown.

3.0 SITE HAZARDS

3.1 Chemical Hazards Analysis

Project Tasks or Phases which may pose hazards from chemical exposures.

Project Task or Phase

Soil Sampling

Chemical Hazard

to soils Possible exposure contaminated with heavy metals, and other unknown abandoned

waste materials

Some applicable MSDS's and/or chemical fact sheets can be found at the end of this plan. Possible routes of exposure for all chemical hazards consist of absorption, inhalation, and ingestion. Exposure over PEL's or other published limits are low.

3.2 Physical Hazard Analysis

Project tasks or phases which may pose physical hazards to workers at the site.

Project Task or Phase

Soil Sampling

Physical Hazard

Slips, trip, falls, and heavy lifting. Outdoor temperatures are expected to be hot, therefore, attention will be given to heat related illnesses, such as

heat stress and heat stroke.



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4.0 PERSONAL PROTECTIVE EQUIPMENT

4.1 General

Site workers will wear the following minimum PPE when engaged in site work:

- ➤ Safety Boots
- ➤ Safety Glasses
- Appropriate work clothes or coveralls

Hard hats must be worn whenever overhead hazards exist such as during any drilling work or working in close proximity with heavy equipment.

4.2 Respirators

Respirators must be worn when performing the following:

- > Working around exposed hazardous materials or wastes
- > Handling heavily contaminated soils, liquids or debris
- > Whenever air monitored concentrations deem it necessary

Cartridge selection for air purifying respirators will be determined by the Project Manager or Health and Safety Manager. Likely selection will be HEPA/volatile organic cartridges.

4.3 Chemical Protective Clothing (CPC)

Coveralls, gloves and boots impervious to chemical hazards must be worn when handling or pumping such materials and there is potential for splash or contact.

If heavily contaminated soils are encountered, impervious CPC must be worn when in direct contact with the soils.

The selection of CPC will be determined by the Health and Safety or Project Manager.

4.4 Surveillance Equipment MiniRam particulate monitor, Cyanide tubes , other misc. field screening supplies

5.0 DECONTAMINATION PROCEDURES

Dispose of dirty or damaged disposable clothing in an appropriate manner. Clean all reusable PPE and sampling tools using water and a mild detergent. Clean all equipment used with water and a mild detergent. Wash hands and face after PPE removal. No contaminated PPE allowed outside the decontamination zone.



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6.0 TRAINING

According to their responsibilities, workers shall have the appropriate training. All workers involved in handling/or remediating of hazardous materials or wastes must have had 40 hours of initial training in accordance with 29 CFR 1910.120. Where such training was received longer than one (1) year ago, eight hours of refresher training must have been provided within the past year. Certificates of completion or other such proof can be provided on request. Workers on site without 40 hour training shall conduct their operations outside the designated hazardous zone.

7.0 MEDICAL SURVEILLANCE

Medical surveillance for employees will be in accordance with CFR 29 1910.120.

8.0 SITE RESOURCES

There is no electricity, phones, or water available on the site. Bottled water, first aid kit, and a cellular phone will be available during site operations.

9.0 EMERGENCY INFORMATION-LOCAL RESOURCES

Ambulance:

911

Hospital Emergency:

911

Poison Control:

1-800-632-8000

Fire Department:

911

Police Department:

911

IDEQ:

(208) 236-6160

10.0 EMERGENCY ROUTE

East on I-86; south on I-15; east on Center Street; south on Hospital Way to Pocatello Regional Medical Center at 777 Hospital Way. See attached map.



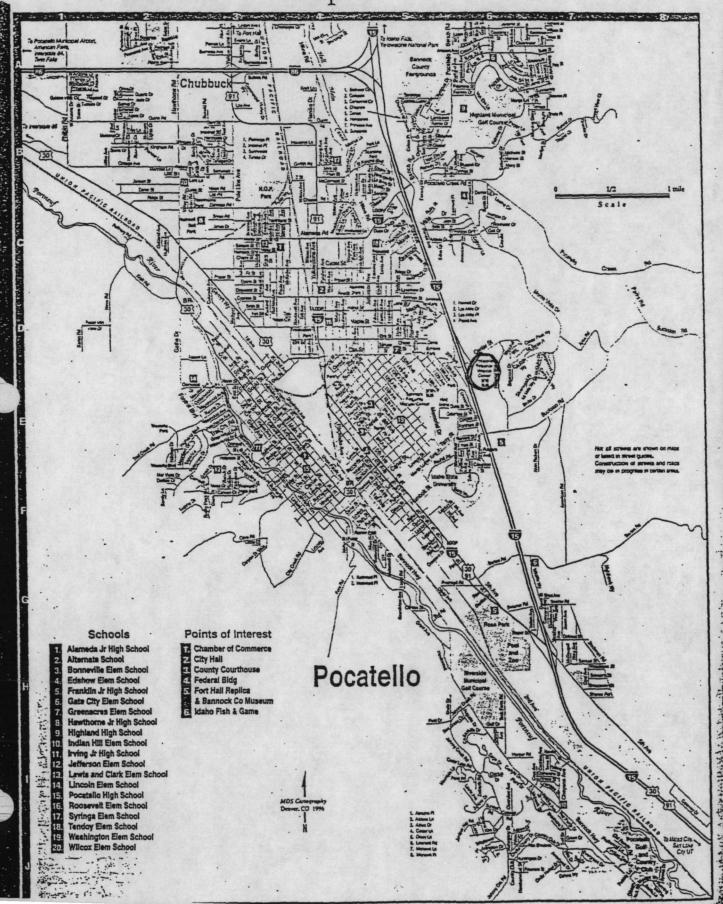
11.0 SAFETY MEETINGS AND SIGNATURES

Site Safety Meetings are to be held daily during project operations and all meetings are to be documented. Sub-contractors working on site must abide by this Safety Plan but, must also have Safety Procedures already in place for their operations. All personnel must read and understand Safety Plan and sign below:

Signatures	Company	Date
Mh ana	Summit	7/2/00
Aud Boar	Summer GI	8/2/00
Mile mas	Summit	8/3/00
Black Have	SEI	8/3/00
12 Mer Horse	Somo	11/17/00
7 3300		-//
Righer Han	Summy T	5/23/01
Marko	11	7/33/01
MAR	i/	7/2/01
Mill Fr	6)	9/3/61
M/1/1/2	n	8/1/4
41/1/20	n	8/2/01
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Pocatello Street Map



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SUMMIT ENVIRONMENTAL, INC. FMC Abingdon UST Decommissioning and Building Entry Tasks SITE SAFETY PLAN

Project No. <u>33.003.02</u>

Plan Prepared by: 11/1/00 Date: 3/1/00

Plan Approved by: Date: 3/1/80

1.0 GENERAL INFORMATION

Project: FMC Corporation, Pocatello, Idaho

Abingdon Site UST Removal

Project Members: Brad Harr

Mike Larango

KASE Employees

Client:

FMC Corporation, Pocatello, Idaho

Site Location:

Highway 30 - West of the FMC plant, Pocatello, Idaho

Facility Description: Abingdon Site - fenced abandoned industrial site with one large building.

Client Contacts:

Mr. Doug Bement - FMC

Phone #: 208-236-8267

Mr. Rob Hartman - FMC

Phone #: 208-236-8212

Project Manager:

Brad Harr

Scope of Work:

Sample, identify contents, remove and decommission 2 Underground Storage Tanks (USTs) from Abingdon site west of the FMC site on Highway 30. Both tanks are assumed to be approximately 500 gallons in size. Past contents of the tanks is assumed to have been hydraulic fluid (north) and gasoline and/or diesel in the south tank. Tanks to be removed according to applicable state and federal regulations. Inventory any hazardous

materials located in building on site for future reuse or disposal.

2.0 SITE CHARACTERISTICS

2.1 Topography: Site is relatively flat consisting of asphalt and concrete surfaces.

2.2 Surrounding Population:

<25,000

2.3 Season/Weather Conditions:

Winter / Spring - cool to cold with possible rain

showers and snow.

2.4 Possible Materials to be Encountered:

Petroleum Products (gasoline, diesel, hydraulic fluid)

Other unknown possible hazardous materials left by past owner, sodium

cyanide, paints, batteries, grease







2.5 Characteristics of Materials:

Combustible / Flammable / Toxic / Corrosive

2.6 Unusual Features

Buried utilities and the unknown orientation of the USTs are of some concern. An attempt to locate tank orientation and underground utilities will be made using a metal detector prior to excavation tasks. Excavations in the suspect UST areas and their applicable piping areas will proceed slowly.

Building entry tasks will involve working in a low light environment. Broken flourescent lights and pigeon excrement is located throughout the building. Sumps and drain hazards are located in the buildings floors. Additional unknown hazards may exist in the building.

- 2.7 Site Status: Inactive USTs are located on west side of on-site building.
- 2.8 History:

The site was formerly a truck repair facility and had been leased to a business that recycled process waste from various local industries. The former lessee is known to have abandoned some waste material at the site. The complete operating history of the USTs is unknown. It is known that the USTs have been out of service for many years. The integrity and contents of the USTs are unknown, however, petroleum compounds are expected. See Work Plan for additional details.

3.0 SITE HAZARDS

3.1 Chemical Hazards Analysis

Project Tasks or Phases which may pose hazards from chemical exposures.

Project Task or Phase
UST Product Sampling &
Excavation

Chemical Hazard

Possible exposure to petroleum compounds, contaminated soils, and other unknown abandoned

waste materials

Tank Cleaning/sampling

Diesel, gasoline (benzene) (See Attached MSDSs)

Building Entry Tasks

Asbestos, mercury from broken flourescent lights, paint related materials, pigeon excrement, unknown and various other known hazardous materials (See Attached MSDSs and other chemical fact sheets)

Some applicable MSDS's and/or chemical fact sheets can be found at the end of this plan. Possible routes of exposure for all chemical hazards consist of absorption, inhalation, and ingestion. Exposure over PEL's or other published limits are low.



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3.2 Physical Hazard Analysis

Project tasks or phases which may pose physical hazards to workers at the site.

Project Task or Phase UST Excavation, Tank Cutting, & Building Entry tasks Physical Hazard

Trips, falls, manual lifting, noise, falling or dropping objects, overhead hazards, heavy equipment operation, concrete removal, crushing and pinching hazards, explosions, insufficient lighting, broken light fixtures, animal hazards

3.3 Control of Ignition Sources & Work Zones

Before any work is done which may involve the release of vapors, the area surrounding the tanks will be barricaded and posted. All sources of ignition shall be kept at a minimum of 50 feet away and upwind of the tank area. No smoking is allowed during any tank work and only personnel involved in the removal are allowed in the tank area.

Exclusion, decontamination, and contamination reduction zones shall be identified by barricades, caution tape or, other similar means of identification. Only personnel involved with work in these areas are allowed access to these areas. See attached supplemental drawings for approximate zone limits and Health and Safety Procedure - Work Zone and Decontamination Procedures.

3.4 Tank Inerting

The tanks will be inerted prior to removal and cutting to reduce the oxygen to below the level necessary to support combustion. Oxygen readings below 10% are safe for most petroleum products. The oxygen limit shall be brought down to below 10% with the goal being 6-7%. Oxygen and LEL readings shall be monitored continually throughout tank work. Entry into tanks should not be required, but if entry becomes necessary it shall only be permitted when air monitoring results indicate it is safe to do so (i.e., oxygen levels above 19.5% and LEL levels below 20%) and under a Confined Space Entry Permit.

4.0 PERSONAL PROTECTIVE EQUIPMENT

4.1 General

Site workers will wear the following minimum PPE when engaged in site work:

- ➤ Safety Boots
- > Safety Glasses
- > Appropriate work clothes or coveralls





Hard hats must be worn whenever overhead hazards exist such as during any drilling work or working in close proximity with heavy equipment.

4.2 Respirators

Respirators must be worn when performing the following:

- During tank sampling and cleaning operations
- Working around exposed hazardous materials or wastes
- ➤ Handling heavily contaminated soils, liquids or debris
- Whenever air monitored concentrations deem it necessary
 (OVM greater than 50 ppm in breathing zone, any detected cyanide gas)

Cartridge selection for air purifying respirators will be determined by the Project Manager or Health and Safety Manager. Likely selection will be HEPA/volatile organic cartridges.

4.3 Chemical Protective Clothing (CPC)

Coveralls, gloves and boots impervious to chemical hazards must be worn when handling or pumping such materials and there is potential for splash or contact.

If heavily contaminated soils are encountered, impervious CPC must be worn when in direct contact with the soils.

The selection of CPC will be determined by the Health and Safety or Project Manager.

4.4 Surveillance Equipment OVM, 4 Gas Meter, Drager pump with Cyanide tubes pH paper, other misc. field screening supplies

5.0 DECONTAMINATION PROCEDURES

Dispose of dirty or damaged disposable clothing in an appropriate manner. Clean all reusable PPE using water and a mild detergent. Dry decon may be required due to freezing temperatures. Clean all equipment used with water and a mild detergent. Wash hands and face after PPE removal. All spent solutions and wash water must be collected and disposed properly. No contaminated PPE allowed outside the decontamination zone. See attached Health and Safety Procedure - Work Zone and Decontamination Procedures.





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6.0 TRAINING

According to their responsibilities, workers shall have the appropriate training. All workers involved in handling/or remediating of hazardous materials or wastes must have had 40 hours of initial training in accordance with 29 CFR 1910.120. Where such training was received longer than one (1) year ago, eight hours of refresher training must have been provided within the past year. Certificates of completion or other such proof can be provided on request. Workers on site without 40 hour training shall conduct their operations outside the designated hazardous zone.

7.0 MEDICAL SURVEILLANCE

Medical surveillance for employees will be in accordance with CFR 29 1910.120.

8.0 SITE RESOURCES

There is no electricity, phones, or water available on the site. Bottled water, first aid kit, 20 lb BC fire extinguisher, and a cellular phone will be available during site operations.

9.0 EMERGENCY INFORMATION-LOCAL RESOURCES



Ambulance:

911

Hospital Emergency:

911

Poison Control:

1-800-632-8000

Fire Department:

911

Police Department:

911

IDEQ:

(208) 236-6160

10.0 EMERGENCY ROUTE

East on I-86; south on I-15; east on Center Street; south on Hospital Way to Pocatello Regional Medical Center at 777 Hospital Way. See attached map.





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7

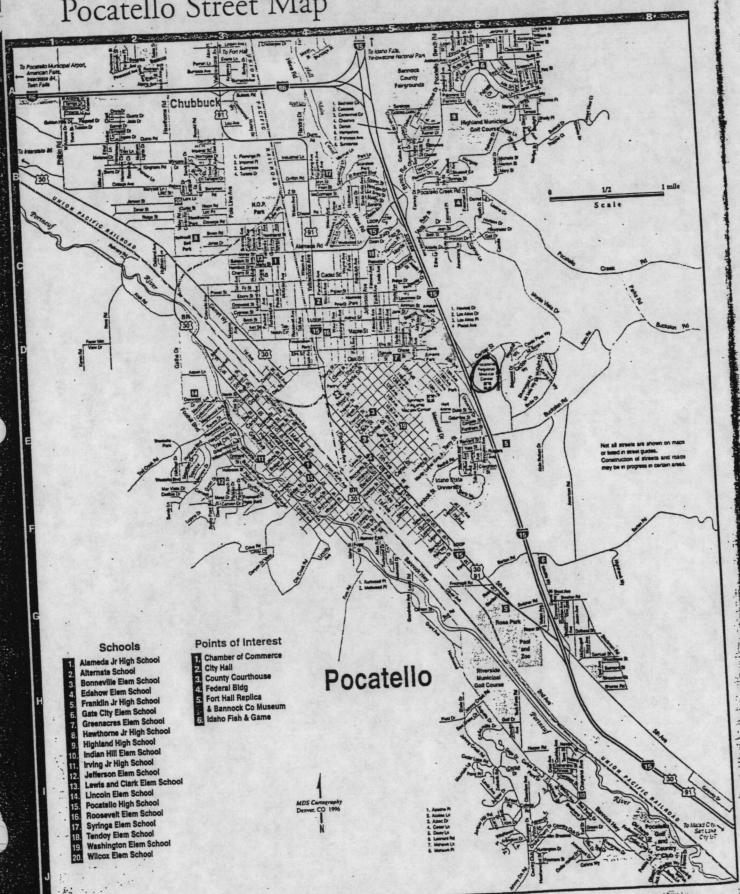
Site Safety Meetings are to be held daily during project operations and all meetings are to be documented. Sub-contractors working on site must abide by this Safety Plan but, must also have Safety Procedures already in place for their operations. All personnel must read and understand Safety Plan and sign below:

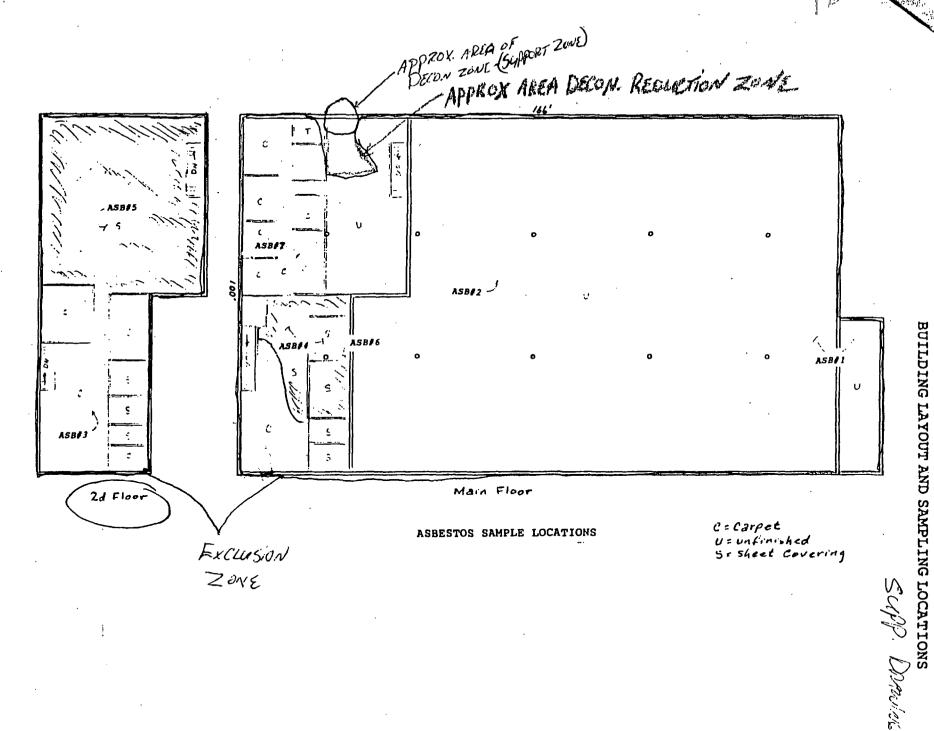
Signatures	Company	Date
Bulley Harr	Sum & Empiron	mate 3/1/00
Mily many	Samuit Environ	martel 3/1/00
Mike Inano	Summit Environ Summit Environ Summit Envi	Commerce 3/3/00
BudHan	Simil	3/3/00
		<u> </u>
Notes: Dring	ack late	
Notes: Driving	ne use pool	





Pocatello Street Map





2

Safety Plan Addition for FMC TESCO Site

BIOLOGICAL RESPIRATORY HAZARDS IN ABANDONED BUILDINGS

Humans who are exposed to heavy accumulations of poultry and/or poultry manure are at special risk of contracting any of four serious diseases, primarily through respiratory exposure. Workers who work in abandoned buildings where pigeons have been roosting are clearly at increased risk of exposure to these infectious agents. People who work in any area that is heavily contaminated with bird manure or bat droppings should take special safety precautions.

The four major diseases associated with pigeon excrement are histoplasmosis, cryptococosis, psittacosis, and rabies. Rabies is usually associated with exposure to bats.

1. "Histoplasmosis is an infectious disease caused by inhaling the spores of a fungus called *Histoplasma capsulatum*." ... Activites known to be associated with increased risk of Histoplasmosis infections include cleaning chicken coops, disturbing soil beneath bird-roosting sites, etc. "Anyone working near activities where material contaminated with the spores becomes airborne can develop histoplasmosis if enough spores are inhaled."

"Histoplasmosis primarily affects a person's lungs, and its symptoms vary greatly." People who have been recently infected with this fungus can have very mild symptoms resembling influenza or even have no symptoms at all. Flu-like symptoms that may appear include "malaise (a general ill feeling), fever, chest pain, dry or nonproductive cough, headache, loss of appetite, shortness of breath, joint and muscle pains, chills, and hoarseness. A chest X-ray can reveal distinct markings on an infected person's lungs."

If the histoplasmosis is not treated with special antifungal medications, chronic lung disease resembling tuberculosis can develop and worsen over the years. A rare, but very severe, form of the disease is "disseminated histoplasmosis." In this case, the fungus spreads to other organs from the lungs and is fatal if not treated in time. Another rare, but serious form of the disease can affect the eyes and cause blindness.

"H. capsulatum grows in soils throughout the world. ... The fungus seem to grow best in soils having a high nitrogen content, especially those enriched with bird manure or bat droppings. The organism can be carried on the wings, feet, and beaks of birds and infect soil under roosting sites or manure accumulations inside or outside buildings.... Habitats of pigeons and bats, and poultry houses with dirt floors have also been found contaminated by H. Capsulatum. Birds







themselves do not seem to become infected by the *Histoplasma* fungus. "Rather, bird manure is primarily a nutrient source for the growth of *H. capsulatum* already present in soil. Unlike birds, bats can become infected with *H. capsulatum* and consequently can excrete the organism in their droppings."

Culturing soils or droppings for *H. capsulatum* is very complicated, time-consuming, and expensive. Thus, the safest approach is to assume that soil with accumulations of bird manure or bat droppings is contaminated with the *Histoplasma* fungus and to use proper safety precautions to protect workers.

"If a colony of bats or a flock of birds is allowed to live in a building or a stand of trees, their manure will accumulate and create a health risk for anyone who enters the roosting area and disturbs the material. ... Areas know or suspected of being contaminated by *H. capsulatum*, such as bird roosts, attics, or even entire buildings that contain accumulations of bat or bird manure, should be posted with signs warning of the health risk."

Full-facepiece, air-purifying respirators should be considered the minimum respiratory protection in extremely dusty conditions where high concentrations of *H. capsulatum* spores could become airborne. Workers should also wear disposable protective clothing with hoods and disposable shoe covers. After working in a spore-contaminated area and **before removing respirators**, workers should remove all protective clothing and shoe coverings and seal them in heavy-duty plastic bags to be disposed of in a landfill.

2. "Cryptococcus neoformans may also be a health risk for workers in environments containing accumulations of bat droppings or bird manure. ... C. neoformans is the infectious agent of the fungal disease cryptococcus." This fungus "multiplies exceedingly well in dry bird manure accumulated in places that are not in direct sunlight." It is strongly associated with old pigeon manure. The primary route of exposure is inhalation.

Safety practices described earlier for protecting workers from *H. capsulatum*, including the use of personal protective equipment, will also protect against inhalation exposures to *C. neoformans* and other microorganisms.

3. Psittacosis is caused by a bacterium (called *Chlamydia psittaci*) rather than a fungus. "It is another infectious disease that people can develop after disturbing and inhaling contaminated bird manure."

"The severity of disease experienced by an infected person can range from asymptomatic to severe systemic disease with pneumonia; death occurs in less than 1% of properly treated patients."

* All quotations from DHHS (NIOSH) publication No. 97-146, September 1997



Len A



MERIAM INSTRUMENTS THE -- MERCURY, MERCURY - MERCURY, ACS

MATERIAL SAFETY DATA SHEET

NSN: 6810002817453

Manufacturer's CAGE: 39739

Part No. Indicator: A

Part Number/Trade Name: MERCURY, MERCURY

General Information

Item Name: MERCURY, ACS

Company's Name: MERIAM INSTRUMENTS CO., THE

Company's Street: 10920 MADISON AVE.

Company's City: CLEVELAND

Company's State: OH

Company's Country: US

Company's Zip Code: 44102-2526 Company's Emerg Ph #: 216-281-1100 Company's Info Ph #: 216-281-1100 Record No. For Safety Entry: 005 Tot Safety Entries This Stk#: 007

Status: SD

Date MSDS Prepared: 05NOV92 Safety Data Review Date: 05NOV92

Supply Item Manager: CX

MSDS Preparer's Name: DOD-HMIS (DGSC-SSH) GASTON Preparer's Company: DEFENSE GENERAL SUPPLY CENTER

Preparer's St Or P. O. Box: 8000 JEFFERSON DAVIS HIGHWAY

Preparer's City: RICHMOND

Preparer's State: VA

Preparer's Zip Code: 23297-5860

MSDS Serial Number: BPFVS Specification Number: NONE Spec Type, Grade, Class: NONE Hazard Characteristic Code: J6

Unit Of Issue: BT

Type Of Container: BOTTLE Net Unit Weight: 500 GRAMS NRC/State License Number: NONE Net Propellant Weight-Ammo: NONE

Ingredients/Identity Information

Proprietary: NO

Ingredient: MERCURY (SARA III) Ingredient Sequence Number: 01

Percent: 100.0

NIOSH (RTECS) Number: OV4550000

CAS Number: 7439-97-6 OSHA PEL: S, C, 0.1 MG/M3 ACGIH TLV: S, 0.05 MG/M3; 9192

Other Recommended Limit: NONE SPECIFIED

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS, SILVERY LIQUID WITH METALLIC LUSTER

Boiling Point: 674F,357C Melting Point: -38F,-39C

Vapor Pressure (MM Hg/70 F): 0.002

Vapor Density (Air=1): 7.0 Specific Gravity: 13.5939

Decomposition Temperature: UNKNOWN Solubility In Water: INSOLUBLE Corrosion Rate (IPY): UNKNOWN



Fire and Explosion Hazard Data

2

Flash Point: NONE

Extinguishing Media: USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. Special Fire Fighting Proc: FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire And Expl Hazrds: MERCURY VAPORS ARE HAZARDOUS. AVOID BREATHING CORROSIVE AND POISONOUS VAPORS. KEEP UPWIND.

Reactivity Data

Stability: YES

Cond To Avoid (Stability): EXCESSIVE HEAT

Materials To Avoid: AMMONIA, METALS, 02, OXIDANTS, ACETYLINICS, BORON,

DIIDOPHOSPHIDE

Hazardous Decomp Products: THERMAL DECOMPOSITION PRODUCTS INCLUDE TOXIC

MERCURY VAPORS AND OXYGEN. Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT APPLICABLE

Health Hazard Data

LD50-LC50 Mixture: LD50 (ORAL RAT) IS UNKNOWN

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: ACUTE: SKIN:IRRITATION. ABSORBED THROUGH IMMEDIATE NECROSIS IN MOUTH, THROAT, ESOPHAGUS & STOMACH. DEATH MAY OCCUR. INHALATION:DYSPNEA, COUGH, FEVER, NAUSEA & VOMITING, DIARRHEA, STOMATITIS,

SALIVATION & METALLIC TASTE. CHRONIC: CNS DISTURBANCES.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: THIS PRODUCT IS NOT LISTED BY NTP, IARC, OR OSHA

Signs/Symptoms Of Overexp: TREMORS, CONVULSIONS & OTHER CNS DISTURBANCES, PNEUMONITIS, CHEST PAINS, DYSPNEA, COUGHING, STOMATITIS, GINGIVITIS AND LOOSENING OF TEETH, SALIVATION, LOSS OF MEMORY, METALLIC TASTE, DIZZINESS, CLUMSINESS, SLURRED SPEECH, DIARRHEA, PAIN & NUMBNESS IN EXTREMITIES, NEPHRITIS, ANXIETY, HEADACHE, WEIGHT LOSS, AND INSOMNIA.

Med Cond Aggravated By Exp: PERSONS WITH A HISTORY OF ALCOHOLISM, CHRONIC KIDNEY DISEASE OR KNOWN ALLERGY TO MERCURY MAY BE AT INCREASED RISK FROM EXPOSURE.

Emergency/First Aid Proc: INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE CPR/OXYGEN. GET MEDICAL ATTENTION. EYE: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH PLENTY OF SOAP & WATER. INGESTION: GET IMMEDIATE MEDICAL ATTENTION. A 5% SOLUTION OF SODIUM FORMALDEHYDE SULFOXYLATE MAY BE USED TO INDUCE VOMITING.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: SMALL SPILL: PICK UP WITH VACUUM EQUIPMENT SPECIFICALLY DESIGNED FOR MERCURY PICK UP OR USE MERCURY SPILL KIT. LARGE SPILL: EVACUATE AND VENTILATE AREA. IF POSSIBLE, STOP LEAK. DIKE TO RETAIN. VACUUM UP FREE LIQUID. DO NOT TOUCH SPILLED MATERIAL.

Neutralizing Agent: NONE

Waste Disposal Method: DISPOSE OF I/A/W ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. DO NOT INCINERATE - RETURN TO RECLAMATION

Precautions-Handling/Storing: STORE IN SEALED UNBREAKABLE POLYETHYLENE CONTAINERS IN A COOL, DRY, WELL VENTILATED AREA AWAY FROM HEAT. PROTECT







CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions: THIS CHEMICAL IS SUBJECT TO SARA SECTION 313 REPORTING. PROVIDE PREPLACEMENT AND PERIODIC MEDICAL EXAMS FOR THOSE REGULARLY EXPOSED TO MERCURY, WITH EMPHASIS ON CNS, SKIN, LUNGS, LIVER, KIDNEYS AND G.I. TRACT

Control Measures

Respiratory Protection: IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL(TLV), USE NIOSH/MSHA APPROVED RESPIRATORS AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR DECISION LOGIC-PUBLICATION NUMBER 87.108.

Ventilation: PROVIDE SUFFICIENT GENERAL/LOCAL EXHAUST VENTILATION IN PATTERN/VOLUME TO CONTROL INHALATION EXPOSURES BELOW OSHA'S PEL.

Protective Gloves: RUBBER

Eye Protection: CHEMICAL SAFETY GOGGLES

Other Protective Equipment: SEPARATE WORK AND STREET CLOTHING. STORE WORK CLOTHING IN SPECIAL LOCKERS. SHOWER BEFORE CHANGING TO STREET CLOTHES. Work Hygienic Practices: USE GOOD CHEMICAL HYGIENE PRACTICE. AVOID UNNECESSARY CONTACT. WASH THOROUGHLY BEFORE EATING OR DRINKING. Suppl. Safety & Health Data: DO NOT GET ON SKIN, IN EYES OR ON CLOTHING. DO NOT BREATHE VAPORS. **MSDS WRITTEN BY HMIS IN RESPOSNSE TO A REQUEST FROM RECEIVING FOR A STATION RETURN. NO RECORD OF THIS SUPPLIER WAS FOUND.

Transportation Data

Trans Data Review Date: 92310

DOT PSN Code: IWD

DOT Symbol: A, W

DOT Proper Shipping Name: MERCURY

DOT Class: 8

DOT ID Number: UN2809
DOT Pack Group: III
DOT Label: CORROSIVE

IMO PSN Code: JKJ

IMO Proper Shipping Name: MERCURY IMO Regulations Page Number: 8191

IMO UN Number: 2809

IMO UN Class: 8

IMO Subsidiary Risk Label: -

IATA PSN Code: PYF

IATA UN ID Number: 2809

IATA Proper Shipping Name: MERCURY

IATA UN Class: 8
IATA Label: CORROSIVE

AFI PSN Code: PYF

AFI Prop. Shipping Name: MERCURY

AFI Class: 8

AFI ID Number: UN2809 AFI Pack Group: I

AFI Basic Pac Ref: 12-13

Additional Trans Data: RQ = 1 POUND OR 454 GRAMS.

Disposal Data

Label Data

Label Required: YES

Technical Review Date: 05NOV92

Label Status: F

Common Name: MERCURY, MERCURY

Chronic Hazard: YES Signal Word: DANGER!



Acute Health Hazard-Severe: X Contact Hazard-Moderate: X

Fire Hazard-None: X

Reactivity Hazard-None: X

Special Hazard Precautions: CONTACT CAUSES BURNS TO SKIN AND EYES. IF INHALED, MAY BE HARMFUL. FIRE MAY PRODUCE IRRITATING OR POISONOUS GASES. IRRITATION. ABSORBED THROUGH SKIN CAUSING ANURIA. EYE: IRRITATION, CORNEAL INJURY OR BURNS. INGESTION: IMMEDIATE NECROSIS IN MOUTH, THROAT, ESOPHAGUS & STOMACH. INHALATION: DYSPNEA, COUGH, FEVER, NAUSEA & VOMITING, DIARRHEA, STOMATITIS, SALIVATION & METALLIC TASTE. FIRST AID: IF INHALED OR INGESTED, REMOVE TO FRESH AIR AND CONSULT A PHYSICIAN. FOR EYES AND SKIN, FLUSH WITH PLENTY OF WATER FOR ABOUT 15-20 MINUTES AND SEEK MEDICAL ATTENTION IMMEDIATELY.

Protect Eye: Y Protect Skin: Y

Protect Respiratory: Y

Label Name: MERIAM INSTRUMENTS CO., THE

Label Street: 10920 MADISON AVE.

Label City: CLEVELAND

Label State: OH

Label Zip Code: 44102-2526

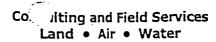
Label Country: US

Label Emergency Number: 216-281-1100



APPENDIX 7

Remediation Closure Soil Laboratory Results November 17, 2000







TECHNICAL MEMORANDUM

Date:

December 12, 2000

To:

Rob Hartman

FMC Corp

From:

Brad Harr 1

Subject:

Williamsen Site Soil Remediation Oversight

Summit Project No. 33.003.06

Summit Environmental provided oversight of the Williamsen site soil remediation during the week of November 13th, 2000. Attached for your review are brief Field Reports for the remediation activities. Remediation activities included the excavation and stockpiling of precipitator dust at the Williamsen site. Envirocon utilized a track hoe, loader, small Bobcat, and 8 to 10 yard dump-truck to excavate and stockpile the waste materials and soil on November 15, 16, and 17, 2000. Summit conducted soil closure sampling for Waste Zones 1, 2, and 5 on Friday, November 17, 2000. Excavation of Zones 3 and 4 is not complete.

TOR FOR BAD HAVE

The excavation proceeded slower than anticipated due to snow cover, frozen ground and Reeve's old backhoe test pits filled with precipitator dust. The available Envirocon equipment was also not optimal for the project. Excavation started on November 15, 2000 at 1:45 pm. On November 16, 2000 the Envirocon crew left the project for two hours to complete work at the Astaris plant. While on-site the crew worked steady and addressed all my waste excavation requests. The Envirocon dump truck and loader counts for material stocked appears to be low given the apparent size of the stockpile. Envirocon's load count generates an estimate of about 2000 to 2200 cubic yards. Summit estimates the stock pile at 3000 to 3500 cubic yards.

Summit collected soil closure samples on November 17, 2000. In Zones 1,2, and 5. Three composite samples composed of four to six sub-samples (see attached table) were delivered to Alchem Laboratories for analysis. Analytical results will follow shortly. Feel free to give me a call with any questions you may have.

Field Report Report No
Project Williamsen Tesco Job No. 33 2009.06 Project Williamsen Tesco Job No. 33 2009.06 Ciient FMC Corp. Date 11-14-20 The stay Have Weather Conditions over cast light snow Prepared By Brad Have
Description of work done, locations, equipment used, quantity estimate (Indicate location and elevation, and mark locations on plans, use separate paragraph for each subject work item, show if approved as meeting specifications or not.) 8:00 Meeting @ FME with Rob Having.
and Brent + Tim from Envirocon -50W, Enviro Source timing 9:10 Site welk with Brent
fence lines, discussed stock pile area
10:15 Envirocean said no work Jeday, had to live up equipment + staff Unleaded Summet Field coming in Building OFF-Site 10:30, Lacked gates
12:00 Summit to store for supplies - stakes, torp Keys made for extras , film, Cleaned respirators, called Rob Motel - reviewed safety + past soil results 16:00 6 hours billed FMC
16:00 6 hours billed Fonc
Visitors None Visito

Field Report

Project Williamsen Tesco Job No. 33.093.06 Prepared By A Weather Conditions over Cas Description of work done, locations, equipment used, quantity estimate (Indicate location and elevation, and mark locations on plans, use separate paragraph for each subject work item, show if approved as meeting specifications or notJ 12:00 30'X 30 averaged tisfactory Conditions & Recommended Correction tachmente

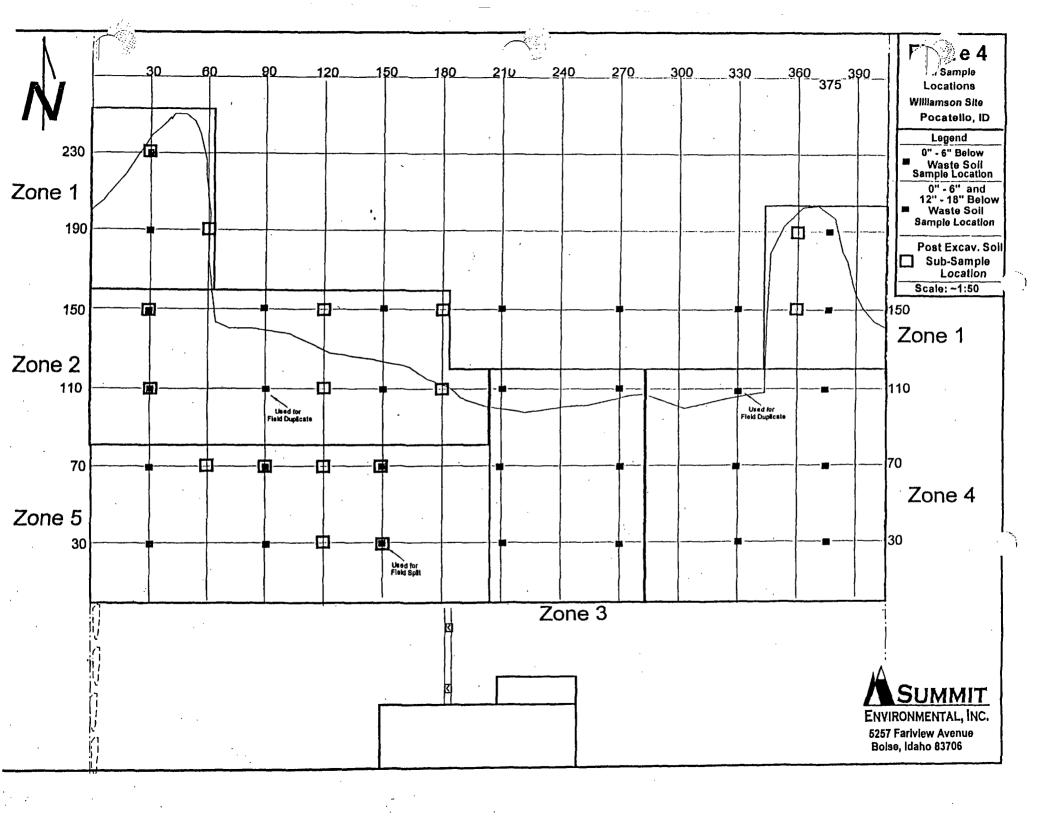
Attachments

Attachments

Wili ison Site Post Excavation Soil Sampling

November 17, 2000

Zone	Sample ID	Grid Coordinates		Collection	Comments
		Х	Υ	Time	Comments
1	Z11	30	; 230	1210	black smear on core surface
	Z14	60	190	1225	snow covered, area not excavated
	Z15	360	190	1755	snow covered, weeds in sample
	Z17	360	150	1750	snow covered, not excavated, .25" precipitator dust
ļ	ZC				composite sample of above four sub-samples
	Z27	30	110	1100	tan soil
2	Z21	30	150	1155	tan soil
	Z210	120	110	1320	tan soil
	Z24	120	150	1710	tan soil
	Z212 '	180	110	1635	tan soil
	Z262	180	150	1645	area not excavated, 2" of grey material
	Z2C				composite sample of above six sub-samples
	Z52	60	70	1045	black smear on surface of core
5	Z53	90	70	1240	
	Z510	120	30	1305	tan soil
	Z54	120	70	1315	tan soil
	Z55	150	30	1405	tan soil
	Z511	150	70	1410	.5" darker material on tan soil
	Z5C				composite sample of above six sub-samples





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soll Analysis

LABORATORY REPORT

83276

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -11/17/2000

TIME COLLECTED

DATE RECEIVED -- - 07/09/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR - SUMMIT

ATTENTION: JERRY CUTLER

SOURCE -: COMP 1 / SOIL / PROJ: WILLIAMSEN SITE

LAB SAMPLE NUMBER - 27969

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.44

07/12/2001

SQ

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

> Suzanne Hówel Laboratory Manager





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: TIME COLLECTED:

11/17/00

12:10 05/24/01

DATE RECEIVED: DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z11 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25645

PERCENT MOISTURE:

pН

10.3%

8.01

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

0.25

Suzanne Howelf, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

DATE COLLECTED:

11/17/00

ATTENTION: JERRY CUTLER

TIME COLLECTED:

12:25

P.O. BOX 668

DATE RECEIVED:

05/24/01

SODA SPRINGS, IDAHO 83276

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z14 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25647

PERCENT MOISTURE: 18.3%

Hq

7.06

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

279.0

Suzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

.11/17/00

TIME COLLECTED:

17:55

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z15 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25644

PERCENT MOISTURE:

pН

12.8% 7.96

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

21.3

Suzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

DATE COLLECTED:

11/17/00

ATTENTION: JERRY CUTLER

TIME COLLECTED:

17:50

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE RECEIVED: DATE REPORTED: 05/24/01 06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750

SOURCE: Z17

MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25646

PERCENT MOISTURE:

15.0%

pΗ

7.76

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

271.0

Suzanne Howell





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

DATE COLLECTED:

11/17/00

ATTENTION: JERRY CUTLER

TIME COLLECTED:

16:45

P.O. BOX 668

DATE RECEIVED:

05/24/01

SODA SPRINGS, IDAHO 83276

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z26 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25642

PERCENT MOISTURE: 20.9%

pΗ

5.03

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

920.0

Suzanne Howell,



104 West 31st Street Boise, Idaho 83714

LABORATORY SAMPLE NUMBER:

Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

11/17/00

TIME COLLECTED:

11:55

DATE RECEIVED: DATE REPORTED: 05/24/01 06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z21 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

25640

PERCENT MOISTURE:

15.9%

pН

6.63

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

202.0

Suzanne Howel, Laboratory Manage



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

11/17/00

TIME COLLECTED:

17:10

DATE RECEIVED: DATE REPORTED: 05/24/01 06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: Z24 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25641

PERCENT MOISTURE:

рΗ

11.4% 7.07

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

208.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

11/17/00

TIME COLLECTED: DATE RECEIVED:

17:55 05/24/01

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750

SOURCE: Z2 COMP MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25643

PERCENT MOISTURE: 14.4%

рΗ

6.16

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

311.0



	NA: Summit Environmental ATTENTION Brack Harr								<i>گر</i> :								A E	LC OF	:]·		EN RIE	/ s		10	chem 4 Wes ise, Id	st 31s	t Stre	eet		<u>;.</u> -
	CITY STATE ZIP CODE								MA	ATRI	IX R							TE	STS	(CI	RCLE	METI	(OD)	, ,						
	SAMPLER (S		·, Sr	1-	P	.N./P.O. NUMBE	R C/	-					(W+ N+) (01 / 8010)	4 / 8260)	9)	PHENOLS (604 / 8040 / 8270) PESTICIDES (608 / 8081 / 8270)		SEMI-VOLATILES (625/8270)	R RCRA METALS	3AS	AS 38 (8011)		(02)	70) 70)	11	Y			NUMBER OF CONTAINERS
·			ain of					_			OTHER TPH - 8015 MOD	18.1	BTEX (602 / 8020) (+N +M)	CL SOLVENTS (601 / 8010	VOC's (601-602 / 8021) GC-MS VOC's (624 / 8260)	PAH's (8270/8310)	LS (604 / 8	PCB's (608 / 8081)	OLATILES	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEADED GAS BTEX+N+M (8020), EDB	O - FUEL OILS	320). PAH (82	- MOTOH OILS 3020), PAH (8270) LVENTS (8010)	6	4	#		BER OF CO
L./ NUN	AB IBER	DATE	TIME		SAMPLE	IDENTIFICA	TION		WATER	SOIL	OTHER TPH - 80	TPH-4	втех (CL. SO	GC-MS	PAH's (PHENO	PCB's (SEMI-V	8 RCR	HBCA -	RBCA -	FUC (8010) RBCA - FI		BTEX (80 CL SOL)	13	3	P		NCW
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Relinationed By (Signature) Date/Time Receive 124/01 1705 7						ed for La	bore	tory	By (Sign (natur	e)		5	1/2	Date //CI	e/Tin	ne	5	Re	eceivo bel T	ed V ag,	Vith Se	al Inta	ict? ~	D.Y.	es C	I No I No		



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

P.O. BOX 4111

POCATELLO, IDAHO

83205

DATE COLLECTED - - -11/17/2000

-12:00 TIME COLLECTED -

- - 11/30/2000 DATE RECEIVED

- - 12/15/2000 DATE REPORTED

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR SOURCE -: Z1-C / SOIL / TCLP / PO# 6200075090 / WILLIAMSON SITE

LAB SAMPLE NUMBER - 17990

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	<0.015	12/11/2000	MM
BARIUM .	< 0.30	12/11/2000	MM
CADMIUM	1.46	12/11/2000	$M\!M$
CHROMIUM	< 0.006	12/11/2000	MM
EAD	< 0.006	12/11/2000	$M\!M$
RCURY	<0.0002	12/14/2000	SQ
<i>∠LENIUM</i>	<0.015	12/11/2000	$M\!M$
SILVER	<0.006	12/11/2000	MM

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Laboratory Manager





104 West 31st Street Boise, Idaho 83714

83205

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

·FMC

P.O. BOX 4111

POCATELLO, IDAHO

DATE COLLECTED - -

-11/17/2000

TIME COLLECTED - - -12:00

DATE RECEIVED - - - 11/30/2000 DATE REPORTED - - - 12/15/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

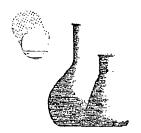
SOURCE -: Z2-C / SOIL / TCLP / PO# 6200075090 / WILLIAMSON SITE

LAB SAMPLE NUMBER - 17991

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.021	12/11/2000	MM
BARIUM	< 0.30	12/11/2000	$M\!M$
CADMIUM	2.31	12/11/2000	MM
CHROMIUM	0.011	12/11/2000	MM
ੋ <i>iEAD</i>	. < 0.006	12/11/2000	MM
デ ^ー マRCURY	< 0.0002	12/14/2000	SQ
<i>₹LENIUM</i>	< 0.015	12/11/2000	MM
SILVER	< 0.006	12/11/2000	MM
DILIVER	(0.000	12/11/2000	. 1414

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104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

P.O. BOX 4111

POCATELLO, IDAHO

83205

DATE COLLECTED - - -11/17/2000

TIME COLLECTED - - -12:00

DATE RECEIVED - - - 11/30/2000

DATE REPORTED - - - 12/15/2000

ATTENTION: KELLY PACKARD

SUBMITTED : BRAD HARR

SOURCE -: Z5-C / SOIL / TCLP / PO# 6200075090 / WILLIAMSON SITE

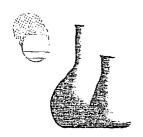
LAB SAMPLE NUMBER - 17992

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.031	12/11/2000	MM
BARIUM	<0.30	12/11/2000	$M\!M$
CADMIUM	7.54	12/11/2000	$M\!M$
CHROMIUM	<0.006	12/11/2000	MM
JEAD	<0.006	12/11/2000	$M\!M$
FRCURY	<0.0002	12/14/2000	SQ
LENIUM .	<0.015	12/11/2000	$M\!M$
SILVER	<0.006	12/11/2000	MM

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> e Howell, Laboratory Manager

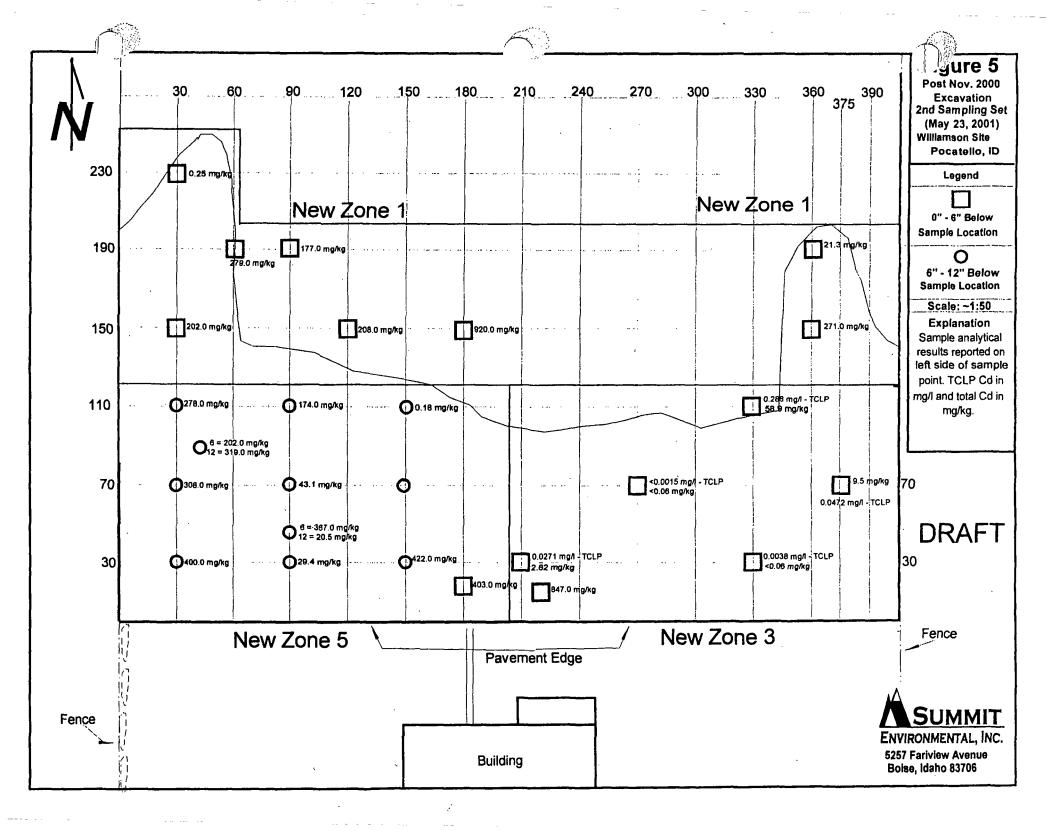


New Symmet Engrowment, Inc. Address 795 S OWNED City Boise State 20 83705) 									디) RI	VI ES		Alchem Labunies, Inc. 104 West 31st Street Bolse, Idaho 83714 Phone (208) 336-1172									
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Proje	ct or Sil	SPA, teW.	D HAR	? ~ 5	SITE													(a) (a)	Killy Mene	45								CONTAINERS		
			in of	Cus	tody	y Fo		cor chine	,	<u> </u>		gr.	втех	418.1 (I.R.) TPH	1 (.0.5)	(1)		TCLP SEMI VOI ATII ES (OCAMS)	P & 20	Cd. C								NUMBER OF CO		
LAB NUMBER	DA	ITE /	TIME	· 编一编	SA	MPLE II	DENTIFIC	CATION		WATER	SOIL	ОТНЕВ	BTEX.	418.1	VOCS	TPH-C	유	101 P		1/2							1/2	<u>5</u>	₽	
7990	11/1	_	12:00		<u>-C</u>						X								X	*			—		1799	3	40	1	_	
1799/	11/1	2/00	12:00	Z_2	-C					<u> </u>	X	<u> </u>							X	<u>t</u>			1	F	799	7		1		
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APPENDIX 8

Remediation Closure Figure and Soil Laboratory Results - May 23, 2000





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

83276

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:50

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

SUBMITTED : BRAD HARR, SUMMIT ATTENTION: JERRY CUTLER SOURCE -: N23-11 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

LAB SAMPLE NUMBER - 25659

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.0038

06/01/2001

MM

pH (SU)

8.21

06/05/2001

SQ

is report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Suzanne

Laboratory Manager





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LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:50

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: NZ3-11 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25659

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM pH (SU) 0.0038

8.21

06/01/2001 06/05/2001 MM SQ

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

14:50

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/15/01

PROJECT: WILLIAMSEN SITE

PN:33.003.06

SOURCE: NZ3-11

MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

2655

PERCENT MOISTURE:

18.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/13/2001

MM

< 0.06



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

83276

TIME COLLECTED - - -14:35

- - 05/24/2001 DATE RECEIVED -

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: N23-9 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

LAB SAMPLE NUMBER - 25658

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

pH (SU) 7.84

0.0271

06/01/2001 06/05/2001 MMSQ

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> Suzanne Laboratory Manager





104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:35

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: NZ3-9 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25658

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.0271

06/01/2001

MM

pH (SU)

7.84

06/05/2001

SQ

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Suzanne Howe

Manager





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT.

ASTARIS

-

DATE COLLECTED:

05/23/01

ATTENTION: JERRY CUTLER

TIME COLLECTED:

14:35

P.O. BOX 668

DATE RECEIVED:

05/24/01

SODA SPRINGS, IDAHO 83276

DATE REPORTED:

06/15/01

PROJECT: WILLIAMSEN SITE

PN:33.003.06 SOURCE: NZ3-9 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

26554

PERCENT MOISTURE:

18.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/13/2001

MM

2.62



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:30

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: N23-8 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25657

Results reported unless hoted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

pH (SU)

0.0472

06/01/2001

ΜM

8.33 06/05/2001 SQ

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Suzanne Howe

Laboratory Manager





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

DATE COLLECTED:

05/23/01

ATTENTION: JERRY CUTLER

TIME COLLECTED:

14:30

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE RECEIVED: DATE REPORTED: 05/24/01 06/15/01

PROJECT: WILLIAMSEN SITE

PN:33.003.06

SOURCE: NZ3-8

MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

PERCENT MOISTURE:

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/13/2001

MM

9.50



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED -- -14:30

DATE RECEIVED - - - 05/24/2001

83276

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: NZ3-8 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

LAB SAMPLE NUMBER - 25657

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.0472

06/01/2001

MM

pH (SU)

8.33

06/05/2001

SQ

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Suzanne How

Laboratory





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:15

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: N23-6 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25656

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

-. CADMIUM

<0.0015

06/01/2001

MM

pH (SU)

7.82

06/05/2001

SQ

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Suzanne





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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

14:15

DATE RECEIVED: DATE REPORTED: 05/24/01 06/15/01

PROJECT: WILLIAMSEN SITE

PN:33.003.06 SOURCE: NZ3-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

26552

PERCENT MOISTURE:

11.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/13/2001

MM

< 0.06





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:15

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: NZ3-6 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25656

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

< 0.0015

06/01/2001

MM

pH (SU)

7.82

06/05/2001

SQ

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Laboratory Manager





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:10

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: NZ3-3 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25655

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.2860

06/01/2001

MM

pH (SU)

7.22

06/05/2001

SQ

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

14:10

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/15/01

PROJECT: WILLIAMSEN SITE

PN:33.003.06 SOURCE: NZ3-3 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

26551

PERCENT MOISTURE: 12.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/13/2001

MM

58.9







104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -14:10

DATE RECEIVED - - - 05/24/2001

DATE REPORTED - - - 06/06/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR, SUMMIT

SOURCE -: N23-3 TCLP / SOIL / P:WILLIAMSON SITE / PO#62000750

83276

LAB SAMPLE NUMBER - 25655

Results reported unless noted: (Chemistry Analysis as mg/l) (Bactería as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.2860

06/01/2001

ΜM

pH (SU)

7.22

06/05/2001

SQ

is report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Suzanne He

aboratory Manager



NAME	<u> </u>	to	FMC	Direc	tly	, 7 1	P					K	e	54	/	13	7	ю	50		mi't		6		
NAME Summit Environmental ATTENTION Brad Harr														Λ LA] 30	C RA	- TO	= N RIE	/ S	1 B	O4 Wes oise, Id hone (2	t 31st 9 aho 83	Street 3714		<u>c.</u>
CITY	CITY Boise STATE ZIP CODE							TRI	x				 ·	TESTS (CIRCLE METHOD)											
SAMPLE PROJEC	Bra	d Ha sen S	ir Ite	P.N./P.O. NUMBE	r.06				0	TPH - 418.1 BTEX (602 / 8020) (+N+M)	CL. SOLVENTS (601 / 8010)	2 / 8021)	GC-MS VOC's (624 / 8260) PAH's (8270 / 8310)	PHENOLS (604/8040/8270)	PESTICIDES (608 / 8081 / 8270)	SEMI-VOLATILES (625/8270)	TCLP-(DESIGNATE ANALYSIS) 8 RCRA METALS	D GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	IILS (8270)	7 OILS (8270) 010)	Cal	CA		NUMBER OF CONTAINERS
LAB			Custod				TER	اً اِل	OTHER TPH - 8015 MOD	TPH - 418.1 BTEX (602 / 80	SOLVENTS	VOC's (601-602/8021)	GC-MS VOC's (624 / PAH's (8270 / 8310)	ENOLS (60	PESTICIDES (608 / 1	MI-VOLATIL	TCLP-(DESIGNAT 8 RCRA METALS	X+N+M (8020)	CA - LEADE X+N+M (8020 (8010)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Jato	CLP	#	UMBER OF
NUMBER	5/as/	14/0	NZ3	IPLE IDENTIFICA	IION		WATE		E E	E E	占	Š	S A	표	Ä G	SE	<u> </u>	HB(8. E. O.	H HB	8. HB	X	1	. 17	- Z
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25659	h	1450	NZ3					X		_				-	_			-				4	X	- -	1
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Relinquished	By (Signatur	re)	5/24	Date/Time	Received	I for Lat	bora	tory	By (S	ignat	ure)			<u> </u>		ate/Ti	me	 CÖ (Rec Lab	eived el Tag	With Sea	al Intact gree?	? 43	Yes Yes	□ No □ No



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -12:10

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR

SOURCE -: S1-6 (25648) TCLP / P: WILLIAMSON SITE

LAB SAMPLE NUMBER - 27886

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS RESULTS DATE ANALYZED ANALYST

CADMIUM 3.71 07/12/2001 MM
pH (SU) 7.20 07/12/2001 SQ

83276

is report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

12:10

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: S1-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25648

PERCENT MOISTURE:

13.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

ММ

202.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS,IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -17:30

DATE RECEIVED - - - 07/06/2001 DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: S1-12 (25650) TCLP / SOIL

LAB SAMPLE NUMBER - 27888

ANALYSIS RESULTS DATE ANALYZED ANALYST

CADMIUM 7.89 07/12/2001 MM

pH (SU) 7.56 07/12/2001 SQ

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Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

17:30

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/05/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: S1-12 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25650

PERCENT MOISTURE: 15.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

319.0





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - --05/23/2001

TIME COLLECTED - - -17:25

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

ATTENTION: JERRY CUTLER

SUBMITTED : BRAD HARR SOURCE -: S2-6 (25649) TCLP / P: WILLIAMSON SITE

LAB SAMPLE NUMBER - 27887

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml) ANALYSIS RESULTS DATE ANALYZED ANALYST CADMIUM 5.03 07/12/2001 MM 07/12/2001 pH (SU) 7.86 SO

83276

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

17:25

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/05/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: S2-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25649

PERCENT MOISTURE:

18.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

367.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -18:22

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: S2-12 (25651) / SOIL

LAB SAMPLE NUMBER - 27889

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

8.13

07/12/2001

SQ

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

18:22

DATE RECEIVED:

05/24/01

DATE REPORTED:

06/05/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: S2-12 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

PERCENT MOISTURE: 19.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

20.5



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

18:43 05/24/01

DATE RECEIVED: DATE REPORTED:

06/05/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: DP1 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25652

PERCENT MOISTURE: 6.9%

_

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

403.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -18:43

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001 SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: DP1 (25652) / SOIL

LAB SAMPLE NUMBER - 27890

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.51

07/12/2001

SQ

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104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

18:48

DATE RECEIVED: DATE REPORTED: 05/24/01 06/05/01

PROJECT: WILLIAMSEN SITE

PO#62000750 SOURCE: DP2 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25653

PERCENT MOISTURE: 12.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

847.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -18:48

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

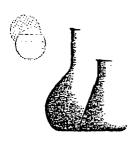
SOURCE -: DP2 (25653) TCLP / SOIL

LAB SAMPLE NUMBER - 27891

ANALYSIS RESULTS DATE ANALYZED ANALYST

CADMIUM 28.1 07/12/2001 MM pH (SU) 7.74 07/12/2001 SQ

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NAME ATTENT	Sum ION Br	mit 8 ad h	IC Directle Environmental		/				*	-		•					S. M		<u>#</u> 1 B	Alchem 04 Wes Boise, Id Phone (2	Laboro t 31st S aho 83	treet	· · · · · · · · · · · · · · · · · · ·	<u> </u>
CITY	<u>. 15 e</u>	ise	STATE ZIP CO	DDE	M	ATR	IX		· ·		i.			TES	TS (CIRC	CLE ME	THO)D)					
PROJEC	TOR SITE		170 P.N./P.O. NUMBER 33,003	1,06					BTEX (602 / 8020) (+N +M) CL. SOLVENTS (601 / 8010)	2 / 8021)	GC-MS VOC's (624 / 8260) PAH's (8270 / 8310)	PHENOLS (604/8040/8270)	PESTICIDES (608 / 8081 / 8270)	ES (625/8270)	TCLP-(DESIGNATE ANALYSIS)	S	AD GAS D GAS), EDB (8011))ILS 1 (8270)	A OILS 4 (8270) 8010)	P			NUMBER OF CONTAINERS
LAB NUMBER	Cha	ain of	Custody Form SAMPLE IDENTIFICAT	TION	WATER	SOIL	OTHER TPH - 8015 MOD	TPH - 418,1	TEX (602 / 80 L. SOLVENTS	VOC's (601-602 / 8021)	GC-MS VOC's (624 / PAH's (8270 / 8310)	HENOLS (60	PESTICIDES (608 /	EMI-VOLATIL	J.P-(DESIGN	8 RCRA METALS	RECA - NO LEAD GAS BTEX+N+M (8020) RBCA - LEADED GAS	BTEX+N+M (8020), EDB (8011) EDC (8010)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Total			NUMBER OF
25648	5/23/2		51-6	<u>,</u>) Y	OF		E 0	×	0 4	<u> </u>	7	1 0	٦	80 2	2 6 02	E 73	<u>æ</u> <u></u>	교 교 교	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+	+	
25649		1725			\dagger	7	+							1	n		Sa		1		4	+-	+-	1
25650		1730	51-12	 .	\dagger	¥	1	-	37		1			7	14		.326	26-7		<u> </u>	X	+		1
25651	/1	1822	52-12			¥	\top		Pra		1			 							X			1
25652	, 11	1843	DP/			Å							\top								X			1
25653	1.	1848	DP2			٨													-		Х			1
25454	13	1859	E90			X															X			1
		·																						
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NAME Symmit	2nvironmenta/
ATTENTION Brad Hav	
ADDRESS 795 5. 0	religid
Boise	STATE ZIP CODE 83705
PHONE #377-2900	FAX#377-2929
SAMPLER (S) Frad Hav	
PROJECT OR SITE	P.N. / P.O. NUMBER



104 West 31st Street Bolse, Idaho 83714

ADDRESS 795 S. Orchard								Phone (208) 336-1172																		
CITY	(Bo)	se	STA	TE ZIP CODE 83705	м	MATRIX TESTS (CIRCLE METHOD)																				
SAMPI	ECT OR SITE		te!	/ P.O. NUMBER			QQ.	2	8020)(+N+M)	CL. SOLVENTS (601 / 8010)	VOC's (601-602 / 8021)	/8310)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	8081)	-1 w 1	ALS	BBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011)	RBCA - FUEL OILS	AH (8270)	HBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Col			NUMBER OF CONTAINERS
Chain of Custody Form							OTHER TPH - R015 MOD	418.1	BTEX (602 /	OLVEN	s (601-6	PAH's (8270/8310)	AOLS (CIDES	PCB's (608 / 8081)	-(DESIG	8 RCRA METALS	N- NO L	A - LEAC +N+M (80	A - FUEL	(8020), P	4 - MOT (8020), P. DLVENTS	Th	#		MBER (
LAB NUMBER	DATE	TIME	SAMPLE II	DENTIFICATION	WATER	SOL		Ē	BTEX	C S		PAH	표	PEST	SEMI	T	8 5	BEX.	BCA BTEX-	ABC L	BTEX	OL. SC	K	0		Ž
25648	05/2-3/01	1210	S1-6	27886		X																	X	X		1
1	05/23/01	1725	52-6	27887		X																	X	V		
25150	Ú5/23/01	1730	51-12	27888		X																	X	X		
25657	05/23/01	1822	52-12	27889		4																		X		(
251552	05/23/01	1843	DPI	27890		2							\downarrow								1			X		!
25/53	05/23/01	1848	DP2	27891		X		ļ									\perp		 				X	X		}
25716	05/2301	1140	NZ52-b	27892		X																	K			
25718	05/23/01	1155	NZ54-6	27893		X													ļ .		1		X			1
25723	05/23/01	1225	NZ59-6	27894		X																	X			11.
	REL	.INQUISHED	BY (Signature)	DA	re				TIME	<u> </u>		RECEIVED BY (Signature)														
Bulley Farr 7/6						01 1630						Gristen Walter											,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									boratory By (Signature) Ifer Dorman						Pate/Time Received With Seal Intact? Yes. Label Tag, COC Agree? Dives D										□ No □ No	



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

11:30

DATE RECEIVED: DATE REPORTED: 05/24/01 06/05/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ51-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25715

PERCENT MOISTURE:

15.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

278.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -11:30

DATE RECEIVED - - - 06/19/2001

DATE REPORTED - - - 06/20/2001 SUBMITTED : SUMMIT ENVIRO. - BR

ATTENTION: JERRY CUTLER SUBMITTED: SUMMI SOURCE -: NZ51-6 (#25715) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26839

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.90

06/19/2001

LB

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Suzanne Howell





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

-05/23/2001

TIME COLLECTED -11:40

- 06/19/2001

- - 06/20/2001 DATE REPORTED -SUBMITTED : SUMMIT ENVIRO. - BR

ATTENTION: JERRY CUTLER SOURCE -: NZ52-6 (#25716) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26840

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

8.12

06/19/2001

LB

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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - -- -05/23/2001

TIME COLLECTED - - -11:40

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: NZ52-6 (25716) TCLP / SOIL

LAB SAMPLE NUMBER - 27892

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

.ANALYST

CADMIUM

1.71

07/12/2001

MM

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

11:40

DATE RECEIVED: DATE REPORTED: 05/24/01 06/05/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ52-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER: 25716

PERCENT MOISTURE:

17.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

ММ

174.0





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -11:48

DATE RECEIVED - - - 06/19/2001

DATE REPORTED - - - 06/20/2001

ATTENTION: JERRY CUTLER

SUBMITTED : SUMMIT ENVIRO. - BR SOURCE -: NZ53-6 (#25717) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26841

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.34

06/19/2001

LB

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Manager





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Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED: DATE RECEIVED:

11:48

DATE REPORTED:

05/24/01 06/05/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ53-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER: 25717

PERCENT MOISTURE: 14.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

0.18





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -11:55

DATE RECEIVED - - - 06/19/2001

DATE REPORTED - - - 06/20/2001

ATTENTION: JERRY CUTLER SUBMITTED: SUMMIT ENVIRO. - BR

83276

SOURCE -: NZ54-6 (#25718) / SOIL / PROJ: WILLIAMSEN SITE

LAB SAMPLE NUMBER - 26842

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

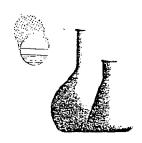
pH (SU)

7.40

06/19/2001

LB

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104 West 31st Street Boise, Idaho 83714

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LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -11:55

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: NZ54-6 (25718) TCLP / SOIL

LAB SAMPLE NUMBER - 27893

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

4.53

07/12/2001

ΜM

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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED: DATE RECEIVED:

11:55 05/24/01

DATE REPORTED:

06/05/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ54-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25718

PERCENT MOISTURE: 13.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

308.0





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -12:00

DATE RECEIVED - - - 06/19/2001

DATE REPORTED - - - 06/20/2001

ATTENTION: JERRY CUTLER

SUBMITTED : SUMMIT ENVIRO. - BR

SOURCE -: NZ55-6 (#25719) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26843

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.76

06/19/2001

LB

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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED: DATE RECEIVED:

12:00

DATE REPORTED:

05/24/01 06/06/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ55-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25719

PERCENT MOISTURE: 15.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

43.1





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

-12:10 TIME COLLECTED

DATE RECEIVED - - - 06/19/2001 DATE REPORTED - - - 06/20/2001

SUBMITTED : SUMMIT ENVIRO. - BR

ATTENTION: JERRY CUTLER

SOURCE -: NZ56-6 (#25720) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26844

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.95

06/19/2001

LB

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Suzanne





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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

12:10 05/24/01

DATE RECEIVED: DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ56-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25720

PERCENT MOISTURE:

19.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

< 0.06





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LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -12:15

DATE RECEIVED - - - 06/19/2001 DATE REPORTED - - - 06/20/2001

ATTENTION: JERRY CUTLER

SUBMITTED : SUMMIT ENVIRO. - BR

SOURCE -: NZ57-6 (#25721) / SOIL / PROJ: WILLIAMSEN SITE

83276

LAB SAMPLE NUMBER - 26845

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

8.49

06/19/2001

LB

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Suzanne Howel





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED: DATE RECEIVED:

12:15 05/24/01

DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ57-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25721

PERCENT MOISTURE: 15.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

400.0

Suzanne Howell,





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

- -05/23/2001 DATE COLLECTED -

TIME COLLECTED -

-12:20

83276

DATE RECEIVED - - - 06/19/2001

DATE REPORTED - - - 06/20/2001

ATTENTION: JERRY CUTLER

SUBMITTED: SUMMIT ENVIRO. - BR

SOURCE -: NZ58-6 (#25722) / SOIL / PROJ: WILLIAMSEN SITE

LAB SAMPLE NUMBER - 26846

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST ·

pH (SU)

7.81

06/19/2001

LB

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Suzanne Howe





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

05/23/01

TIME COLLECTED:

12:20 05/24/01

DATE RECEIVED: DATE REPORTED:

06/06/01

PROJECT: WILLIAMSEN SITE

PN: 33.003.06

SOURCE: NZ58-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25722

PERCENT MOISTURE: 13.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

29.4





104 West 31st Street. Boise, Idaho 83714

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LABORATORY REPORT

ASTARIS P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -12:25

DATE RECEIVED - - - 06/19/2001 DATE REPORTED - - 06/20/2001

ATTENTION: JERRY CUTLER SUBMITTED : SUMMIT ENVIRO. - BR

83276

SOURCE -: NZ59-6 (#25723) / SOIL / PROJ: WILLIAMSEN SITE

LAB SAMPLE NUMBER - 26847

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as Organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

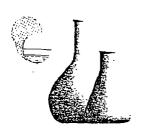
pH (SU)

7.89

06/19/2001

LB

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LABORATORY REPORT

P.O. BOX 668
SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -05/23/2001

TIME COLLECTED - - -12:25

DATE RECEIVED - - - 07/06/2001

DATE REPORTED - - - 07/16/2001

SUBMITTED : BRAD HARR

ATTENTION: JERRY CUTLER

SOURCE -: NZ59-6 (25723) TCLP / SOIL

LAB SAMPLE NUMBER - 27894

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

7.45

07/12/2001

MM

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Phone (208) 336-1172 FAX (208) 336-7124

DATE COLLECTED:

TIME COLLECTED:

DATE RECEIVED:

DATE REPORTED:

Water, Waste Water and Soil Analysis

05/23/01

05/24/01

06/06/01

12:25

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSEN SITE

PN: 33.003.06 SOURCE: NZ59-6 MATRIX: SOIL

SUBMITTED: SUMMIT ENVIRO. - BRAD HARR

LABORATORY SAMPLE NUMBER:

25723

PERCENT MOISTURE: 16.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

6/1/2001

MM

422.0

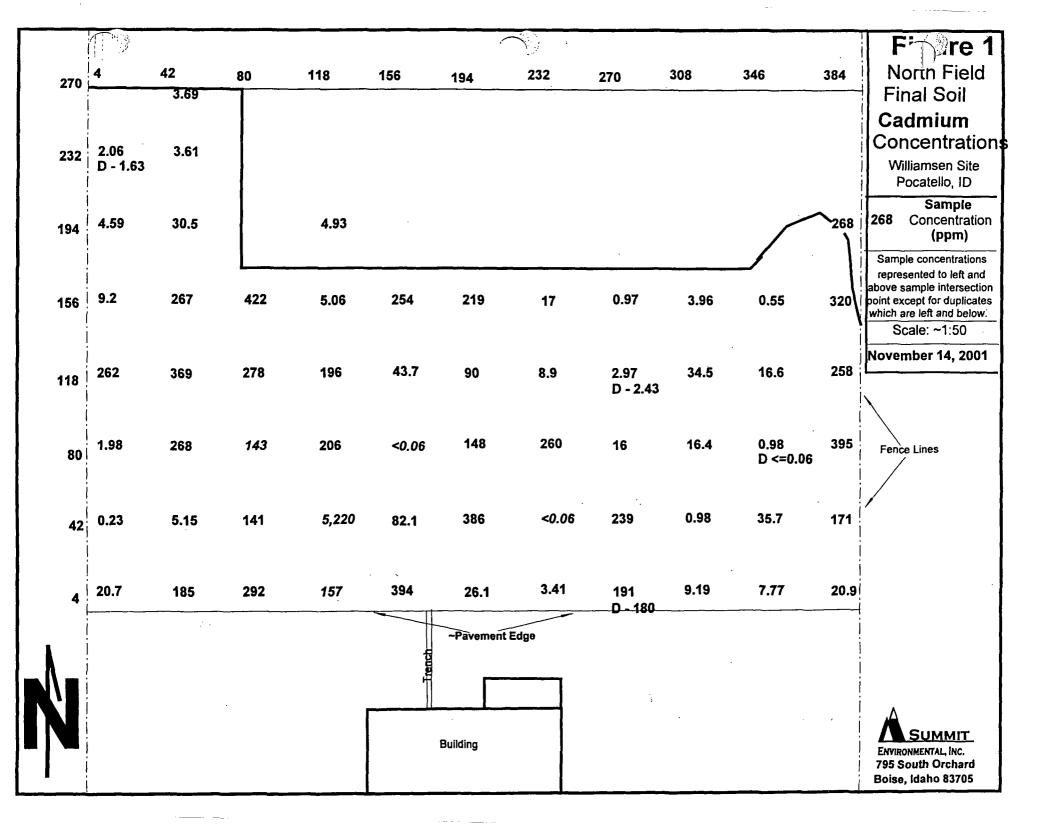


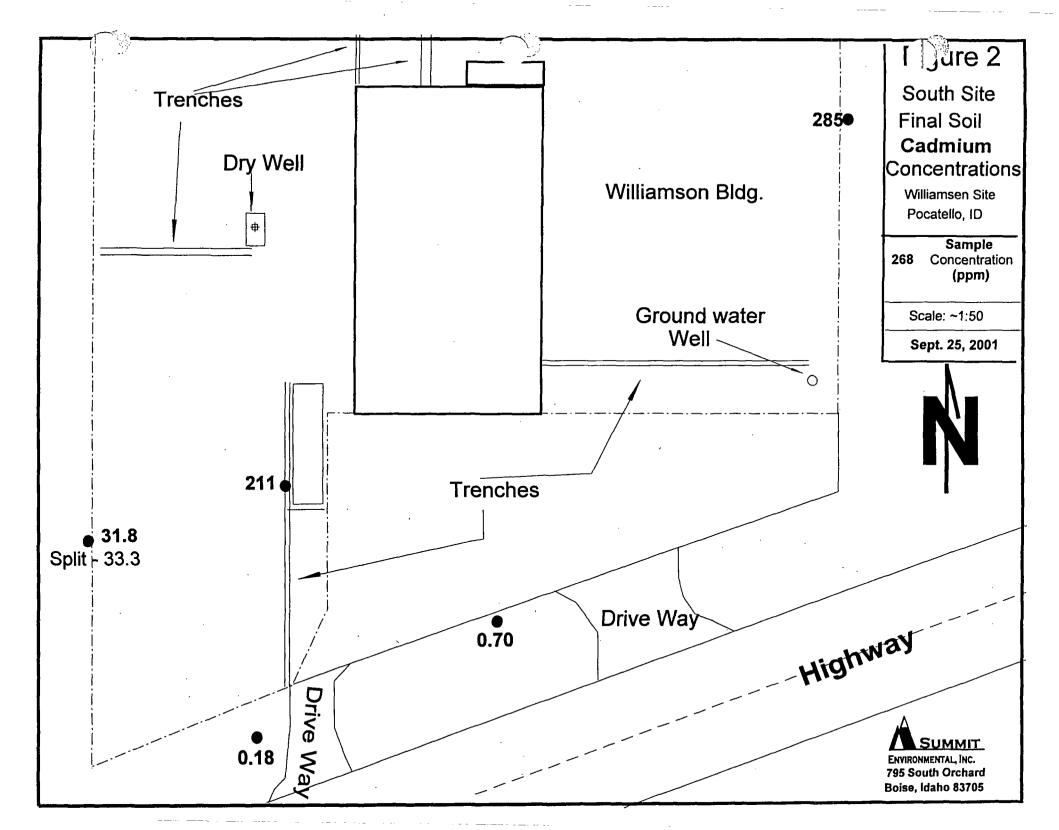
Suzanne Howell,

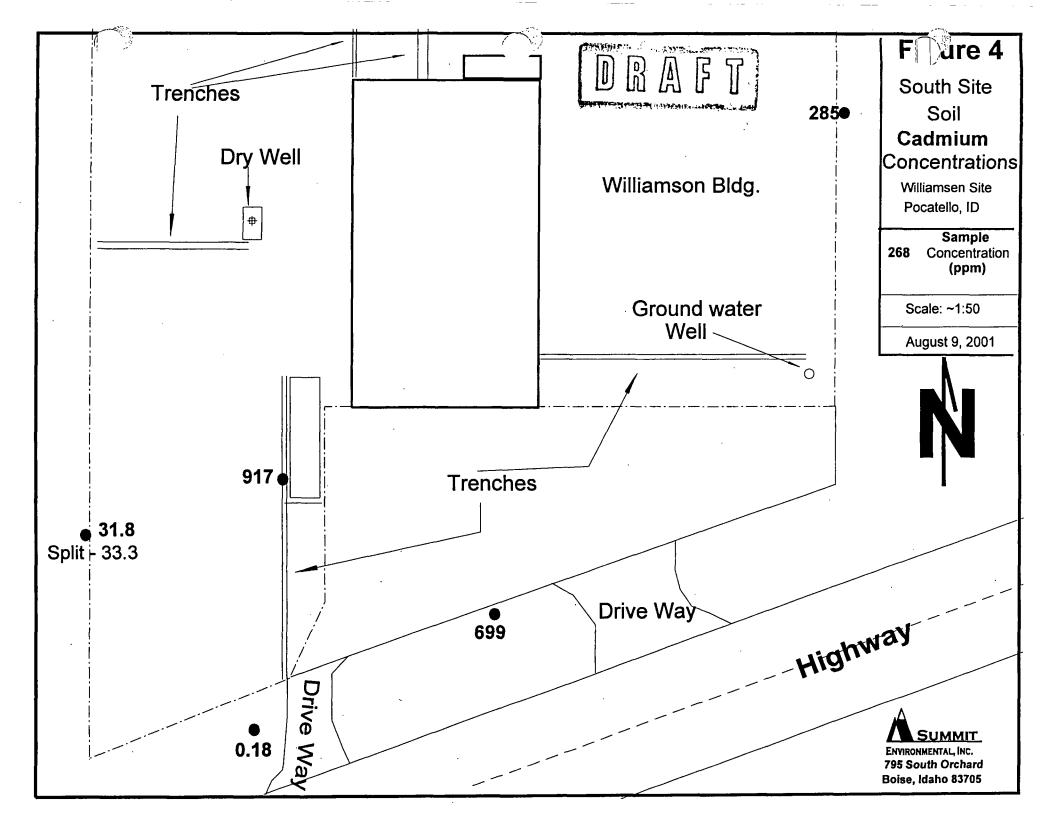
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THE SOIGE STATE ZIPCODE TO STATE ZIPCODE									ATRIX	MOD		BTEX (602 / 8020) (+N +M)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	PAH'S (8270 / 8310) PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	625 / 8270)				A - LEADED GAS +N+M (8020), EDB (8011)				2	delight	10/11/01	NUMBER OF CONTAINERS
LAB NUMBER	DATE	TIME	Cusii		È IDENTIFICA	ATION		WATER	SOIL	15	TPH - 418.1	BTEX (602)	VOC's (601	GC-MS VOC	PAH's (8270/8310) PHENOLS (604/80	PESTICIDE	PCB's (608 / 8081) SFMI-VOLATILES (TČLP-(DESI	8 RCRA METALS	HBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEA BTEX+N+M (8 EDC (8010)	RBCA - FUE BTEX (8020).	RBCA - MO' BTEX (8020), CL. SOLVENT		1519	t d		NUMBER
25715	5/23/01	1130	N	25,	1-6		<u></u>		+																4	4	\prod	1
25746	11	1140	NZ	52	-6		1	_	7																7	4		1
287/7	11	1148	NZ	53	-6		1		4																1	4		1
25718	11	1155	NZ	54	-6		/		Y												·				A	+		1
25719	11 .	1200	NZ	5 5	-6			,	X															1	X	4		1
25720	_	1210	NZ	56	:-6		V		X																	4		
2572/	15	1215	NZ	-57	-6		7		X	3	×	op	an	(20	a		mi	Y	C	2 мΩ	(e)	fely		ζ,	4		1
2572) "	1220	NZ	58	-6		\ \		K				nic		. \	De	15		> /	,	ÎK	1	7		1	1		1
2572	3 1,	1225	NZ	59	-6)	_	X		\top		ve		210	9	ho	14	7			lug	50	1	4	4		1.
	REL	INQUISHED	BY (Signati	ıre)			DATE	· .			TI	ME								REC	EIVED	BY (Signatu	ire)		_		
Relinquished	Relinquished By (Signature) Date/Time Received for Laboratory By (Signature) Date/Time Received With Seal Intact? Signature Sig																											

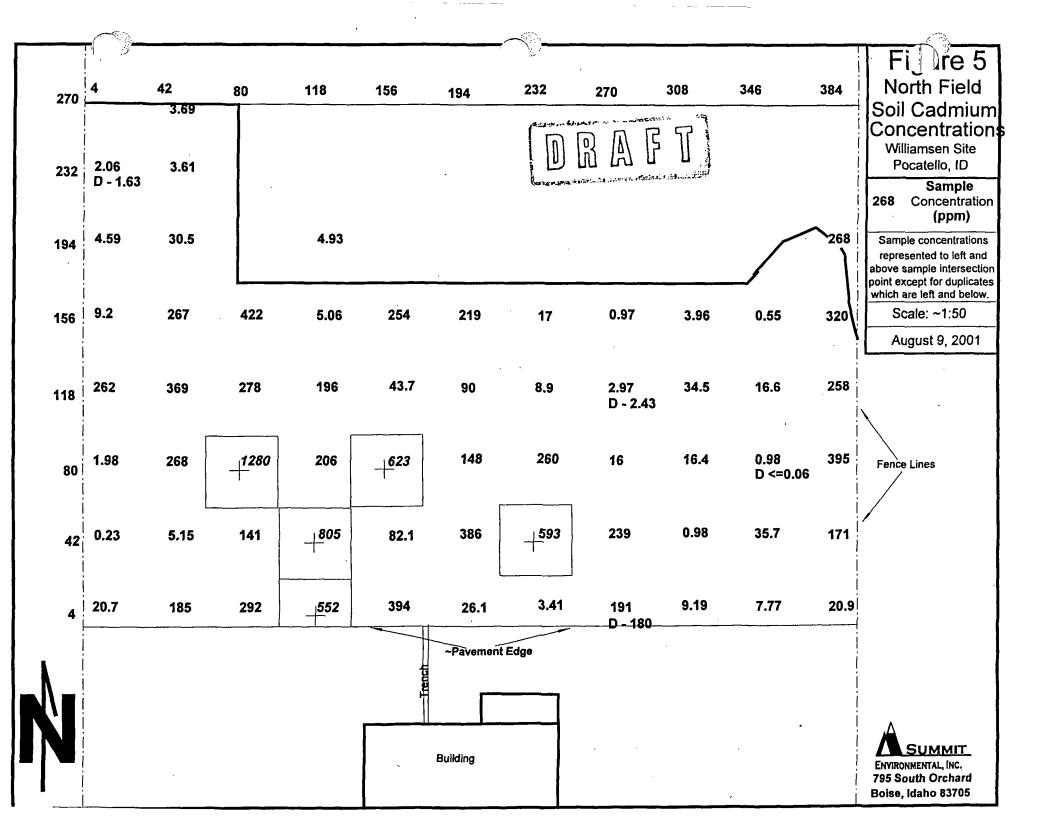
APPENDIX 9

Remediation Closure Figure and Soil Laboratory Results - August, September, & November 2001











104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/09/01

TIME COLLECTED:

13:19

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: TSD101 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30101

PERCENT MOISTURE:

23.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

917.0



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/09/01

TIME COLLECTED:

13:09

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/21/01

PROJECT: WILLIAMSON

PN# 300.003.5 SOURCE: TS101 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30100

PERCENT MOISTURE:

19.6%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

1030.0

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -08/01/2001

TIME COLLECTED - - -14:00

DATE RECEIVED - - - 08/02/2001

DATE REPORTED - - - 08/10/2001

ATTENTION: JERRY CUTLER SUBMITTED : MIKE LARANGO

83276

SOURCE -: COMP-DWS TCLP / SOIL / PN: 33.003.06

LAB SAMPLE NUMBER - 29519

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.015	08/02/2001	MM
BARIUM	0.36	08/02/2001	MM
CADMIUM	1.90	08/02/2001	MM
CHROMIUM	<0.006	08/02/2001	$M\!M$
LEAD	<0.006	08/02/2001	MM
MERCURY	<0.0002	08/10/2001	SQ
ÆLENIUM	0.039	08/02/2001	MM
SILVER	<0.006	08/02/2001	MM

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Suzanne Howell



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LABORATORY REPORT

83276

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

ATTENTION: JERRY CUTLER

DA.

DATE COLLECTED - - -08/01/2001

TIME COLLECTED - - -13:45

DATE RECEIVED - - - 08/02/2001

DATE REPORTED - - - 08/10/2001

SUBMITTED : MIKE LARANGO

SOURCE -: COMP-DWB TCLP / SOIL / PN: 33.003.06

LAB SAMPLE NUMBER - 29518

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

$ extit{RESULTS}$	DATE ANALYZED	ANALYST
0.028	08/02/2001	MM
< 0.30	08/02/2001	MM
<0.0015	08/02/2001	MM
<0.006	08/02/2001	$M\!M$
<0.006	08/02/2001	MM
<0.0002	08/10/2001	SQ
<0.015	08/02/2001	MM
0.010	08/02/2001	MM
	0.028 <0.30 <0.0015 <0.006 <0.006 <0.0002 <0.015	0.028

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Suzanne Howell



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN# 300.003.5 SOURCE: FLSE84 MATRIX: SOIL DATE COLLECTED: 08/09/01

TIME COLLECTED:

13:03

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/21/01

LABORATORY SAMPLE NUMBER: 30111

PERCENT MOISTURE:

3.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

699.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN# 300.003.5 SOURCE: FLW116 MATRIX: SOIL

DATE COLLECTED:

08/09/01

TIME COLLECTED:

12:40

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/21/01

LABORATORY SAMPLE NUMBER: 30097

PERCENT MOISTURE:

6.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

285.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 118/4 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

14:41

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30051

PERCENT MOISTURE:

10.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

552.0





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 118/42** MATRIX: SOIL

DATE COLLECTED: 08/08/01

TIME COLLECTED:

17:04

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30069

PERCENT MOISTURE:

11.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

805.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 118/80 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

17:09

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30070

PERCENT MOISTURE:

11.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

206.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: 08/08/01

TIME COLLECTED:

17:14

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 118/118 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30071

PERCENT MOISTURE:

11.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

196.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 118/194 MATRIX: SOIL

DATE COLLECTED:

08/08/01

TIME COLLECTED:

17:24

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30072

PERCENT MOISTURE:

10.6%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

4.93



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 156/4 MATRIX: SOIL DATE COLLECTED: 0

08/08/01

TIME COLLECTED:

14:45

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30052

PERCENT MOISTURE:

9.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

394.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 156/42 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

8:19

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30074

PERCENT MOISTURE:

17.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

82.1



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 156/80 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

8:22

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

LABORATORY SAMPLE NUMBER: 30102

PERCENT MOISTURE:

34.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

623.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: 08/09/01

TIME COLLECTED:

8:25 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 156/118 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30103

PERCENT MOISTURE:

23.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

43.7





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 156/156 MATRIX: SOIL DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:28

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30104

PERCENT MOISTURE:

13.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

254.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 194/4 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

14:49

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30053

PERCENT MOISTURE:

8.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

ММ

26.10





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 194/42 MATRIX: SOIL DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:32

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30105

PERCENT MOISTURE:

14.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

386.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 194/80 MATRIX: SOIL DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:36

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30106

PERCENT MOISTURE:

13.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

148.0





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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 194/118 MATRIX: SOIL DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:40

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30107

PERCENT MOISTURE:

9.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

90.0





104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:45

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 194/156 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30108

PERCENT MOISTURE:

10.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

219.0



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 232/4** MATRIX: SOIL

DATE COLLECTED: 08/08/01

TIME COLLECTED:

14:54

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30054

PERCENT MOISTURE:

15.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

3.41



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 232/42 MATRIX: SOIL

DATE COLLECTED:

08/09/01

TIME COLLECTED:

8:49

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30109

PERCENT MOISTURE:

11.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

593.0



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 232/80 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

8:54

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

LABORATORY SAMPLE NUMBER: 30110

PERCENT MOISTURE:

12.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

260.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: 08/08/01

TIME COLLECTED:

8:58

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 232/118 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30075

PERCENT MOISTURE:

9.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

8.9





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 232/156 MATRIX: SOIL DATE COLLECTED: 08/08/01

TIME COLLECTED:

9:03

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30076

PERCENT MOISTURE:

9.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

17.0



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:16

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 270/4D MATRIX: SOIL '

LABORATORY SAMPLE NUMBER: 30056

PERCENT MOISTURE:

18.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

180.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 270/4 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:00

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30055

PERCENT MOISTURE:

15.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

191.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 270/42 MATRIX: SOIL

DATE COLLECTED:

08/08/01

TIME COLLECTED:

9:42

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30077

PERCENT MOISTURE:

20.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

239.0



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: 08/09/01

TIME COLLECTED:

9:47 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 270/80 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30078

PERCENT MOISTURE:

27.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM.

8/27/2001

MM

16.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 270/118 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

9:53 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30079

PERCENT MOISTURE:

6.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

2.97



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 270S/118 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

9:53 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30113

PERCENT MOISTURE:

9.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM .

8/27/2001

MM

2.43



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 270/156 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

9:58 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30080

PERCENT MOISTURE:

8.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

0.97



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:03 08/10/01

DATE RECEIVED: DATE REPORTED:

09/07/01

SOURCE: 308/4 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30057

PERCENT MOISTURE:

16.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

9.19



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED: 08/09/01

TIME COLLECTED:

10:03 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 308/42 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30081

PERCENT MOISTURE:

5.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

0.98



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 308/80 MATRIX: SOIL

DATE COLLECTED:

08/09/01

TIME COLLECTED:

10:08

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30082

PERCENT MOISTURE:

13.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

16.4





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 308/118 MATRIX: SOIL

08/09/01 DATE COLLECTED:

TIME COLLECTED:

10:23

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30083

PERCENT MOISTURE:

6.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

34.5



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 308/156 MATRIX: SOIL DATE COLLECTED: 08/09/01

TIME COLLECTED:

10:31 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30084

PERCENT MOISTURE:

8.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

3.96



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 346/4 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:05 08/10/01

DATE RECEIVED: DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30058

PERCENT MOISTURE:

19.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

7.77



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 346/42 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

10:40 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30085

PERCENT MOISTURE:

14.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

35.7





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 346/80D MATRIX: SOIL

DATE COLLECTED:

08/09/01

TIME COLLECTED:

10:54 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30087

PERCENT MOISTURE:

13.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

< 0.06



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 346/80

MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

10:48

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30086

PERCENT MOISTURE:

13.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

0.98



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 346/118 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

10:59 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30088

PERCENT MOISTURE:

9.6%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

16.6

Suzanne Howel , Laboratory Manager



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 346/156 MATRIX: SOIL DATE COLLECTED: 08/09/01

TIME COLLECTED:

11:06

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30089

PERCENT MOISTURE:

4.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

0.55

Suzanne Howell, Laboratory Manager



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:10 08/10/01

DATE RECEIVED: DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 384/4 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30059

PERCENT MOISTURE:

19.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

20.9

Suzanne Howell,



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

TIME COLLECTED:

DATE COLLECTED:

08/09/01

11:28

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 384/42 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30090

PERCENT MOISTURE:

4.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

171.0

Suzanne Howell, aboratory Manager



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 384/80 MATRIX: SOIL- DATE COLLECTED:

08/09/01

TIME COLLECTED:

11:34

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30091

PERCENT MOISTURE:

9.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

395.0

Suzanne Howell Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 384/118 MATRIX: SOIL

DATE COLLECTED:

08/09/01

TIME COLLECTED:

11:51

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30092

PERCENT MOISTURE:

8.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

258.0

Suzanne Howell,





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 384/156 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

11:58 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30093

PERCENT MOISTURE:

11.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

320.0

Suzanne Howell, abbratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: 384/194 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

12:03 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30094

PERCENT MOISTURE:

15.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

268.0

Suzanne Howell Laboratory Manager





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LABORATORY REPORT

ASTARIS P.O. BOX 668

SODA SPRINGS, IDAHO

ATTENTION: JERRY CUTLER

DATE COLLECTED - - -08/08/2001

TIME COLLECTED - - -17:35

83276 DATE RECEIVED - - - 08/10/2001

DATE REPORTED - - - 09/07/2001

SUBMITTED : BRAD HARR / SUMMIT

SOURCE -: EBOI / WATER / P: WILLIAMSON / PN# 300.003.5

LAB SAMPLE NUMBER - 30073

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.0028

09/04/2001

LB

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Laboratory Manager





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LABORATORY REPORT

83276

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO DATE COLLECTED - - -

TIME COLLECTED - ~ -

DATE RECEIVED - - - 08/10/2001 DATE REPORTED - - 08/30/2001

ATTENTION: JERRY CUTLER

SUBMITTED : SUMMIT / BRAD HARR

SOURCE -: ULTRA-PURE WATER P: WILLIAMSON / PN# 33.003.5

LAB SAMPLE NUMBER - 30125

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

<0.005

08/27/2001

MM

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Suzanne Howell Laboratory Manager





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Water, Waste Water. and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:00 08/10/01

DATE RECEIVED: DATE REPORTED:

08/30/01

SOURCE: DW128 MATRIX: SLUDGE

LABORATORY SAMPLE NUMBER: 30115

PERCENT MOISTURE:

34.7%

ANALYSIS

DATE ANALYZED

ANALYST

MM

SQ

SQ

RESULTS (mg/kg)

Dry Weight

CADMIUM

CYANIDE, TOTAL

CYANIDE, AMENABLE TO CL2

8/27/2001

8/23/2001

8/23/2001

3.37 354.0

175.0

Suzanne Howell,/Laboratory Manager





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LABORATORY REPORT

ASTARIS P.O. BOX 668 SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -08/09/2001

TIME COLLECTED - - -14:00

DATE RECEIVED - - - 08/10/2001

DATE REPORTED - - - 08/30/2001

ATTENTION: JERRY CUTLER SUBMITTED: SUMMIT / BRAD HARR SOURCE -: TB / WATER / P: WILLIAMSON / PN# 33.003.5

LAB SAMPLE NUMBER - 30114

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

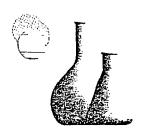
<0.0005

08/27/2001

ΜM

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Suzanne Howell Laboratory Manag





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

83276

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -08/09/2001

TIME COLLECTED - - -13:25

DATE RECEIVED - - - 08/10/2001

DATE REPORTED - - - 08/30/2001

ATTENTION: JERRY CUTLER

SUBMITTED : SUMMIT / BRAD HARR

SOURCE -: EB02 / WATER / P: WILLIAMSON / PN# 33.003.5

LAB SAMPLE NUMBER - 30112

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

CADMIUM

0.0056

08/27/2001

MM

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Suzanne Howel

Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: FLES43 MATRIX: SOIL

DATE COLLECTED: 08/09/01

TIME COLLECTED:

12:55

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30099

PERCENT MOISTURE:

15.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

33.3

Suzanne Howell,





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: FLE43 MATRIX: SOIL DATE COLLECTED:

08/09/01

TIME COLLECTED:

12:55

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30098

PERCENT MOISTURE:

15.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

31.8

Suzanne Howell Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/09/01

TIME COLLECTED:

12:48

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

PROJECT: WILLIAMSON

PN#33.003.5

SOURCE: FLSW83 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30096

PERCENT MOISTURE:

1.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

0.18



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 4/4 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

14:28

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/28/01

LABORATORY SAMPLE NUMBER: 30048

PERCENT MOISTURE:

7.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

20.7

Suzanne Howell, Laboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:22

DATE RECEIVED: DATE REPORTED: 08/10/01 09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 4/42** MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30060

PERCENT MOISTURE:

8.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

0.23

Suzanne Howell Laboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:30

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 4/80 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30061

PERCENT MOISTURE:

7.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

1.98

Suzanne Howell, L aboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:32

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 4/118** MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30062

PERCENT MOISTURE:

11.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

262.0

Suzanne Howell





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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 4/156 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:35

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30063

PERCENT MOISTURE:

9.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

9.2

Suzanne Howell, Laboratory Manager



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LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 4/194 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:42

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30064

PERCENT MOISTURE:

6.4%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

4.59

Suzanne Howell, Laboratory Manage



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:48

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 4/232** MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30065

PERCENT MOISTURE:

4.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

2.06

Suzanne Howell



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PN#33.003.5 **SOURCE: 4/232S** DATE COLLECTED:

08/08/01

TIME COLLECTED:

15:48 08/10/01

DATE RECEIVED: DATE REPORTED:

08/28/01

PROJECT: WILLIAMSON

MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30039

PERCENT MOISTURE:

3.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

1.63

Suzanne Howell Latoratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/4 MATRIX: SOIL DATE COLLECTED: 08/08/01

TIME COLLECTED: DATE RECEIVED:

14:30

DATE REPORTED:

08/10/01 08/28/01

LABORATORY SAMPLE NUMBER: 30049

PERCENT MOISTURE:

5.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

185.0



Suzanne Howell oratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/42 MATRIX: SOIL DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:06 08/10/01

DATE RECEIVED: DATE REPORTED:

08/28/01

LABORATORY SAMPLE NUMBER: 30040

PERCENT MOISTURE:

12.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

5.15

Laboratory Manager Suzanne Howell,





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 42/80** DATE COLLECTED:

DATE REPORTED:

08/08/01

TIME COLLECTED:

16:09

DATE RECEIVED:

08/10/01 08/28/01

MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30041

PERCENT MOISTURE:

10.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

268.0

Suzanne Howell aboratory Manager





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/118 MATRIX: SOIL

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:15

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

LABORATORY SAMPLE NUMBER: 30042

PERCENT MOISTURE:

18.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

369.0

Suzanne Howell,



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS .

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/156 DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:18

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30043

PERCENT MOISTURE:

18.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

267.0

Suzanne Howell, Laboratory Manager





104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS.

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/194 DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:21

DATE RECEIVED: DATE REPORTED: 08/10/01 08/30/01

MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30044

PERCENT MOISTURE:

13.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/27/2001

MM

30.5

Suzanne Howell .abbratory Manager



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:29

DATE RECEIVED: DATE REPORTED: 08/10/01 09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/232 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30045

PERCENT MOISTURE:

9.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

3.61

Suzanne Howell,



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 42/270 MATRIX: SOIL

DATE COLLECTED:

08/08/01 16:33

TIME COLLECTED: DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

LABORATORY SAMPLE NUMBER: 30046

PERCENT MOISTURE:

11.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

3.69

Suzanne Howell, aboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 80/4 DATE COLLECTED:

08/08/01

TIME COLLECTED:

14:35

DATE RECEIVED: DATE REPORTED: 08/10/01 08/28/01

MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30050

PERCENT MOISTURE:

8.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

8/20/2001

MM

292.0

Suzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:48

DATE RECEIVED:

08/10/01

DATE REPORTED:

09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 80/42 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30047

PERCENT MOISTURE:

12.6%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

141.0

Suzanne Howell



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 **SOURCE: 80/80** MATRIX: SOIL

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:53

DATE RECEIVED: DATE REPORTED: 08/10/01 09/07/01

LABORATORY SAMPLE NUMBER: 30066

PERCENT MOISTURE:

11.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

1280.0

Suzanne Howell



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:56

DATE RECEIVED: DATE REPORTED: 08/10/01 09/07/01

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: 80/118 MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 30067

PERCENT MOISTURE:

12.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

9/4/2001

LB

278.0

Suzanne Howe boratory Manager

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SAMP	tikl !	lavan Msov	es Brad 1	Harr D. NUMBER D63.5				BTEX (602 / 8020 / 8260)	(+N +M) CL. SOLVENTS (601 / 8010)	/ 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	11)	SEMI-VOLATILES (625/8270)) GAS 8260)	GAS -N+M,	RBCA - FUEL OILS BTEX (8020 / 8260), PAH (8270)	RBCA - MOTOR OILS BTEX (8020/8260), PAH (8270) CL SOLVENTS (8010)	ust,				CONTAINERS
	Cha	ain of	Custody Fo	rm				BTEX (602 / 8020 / 826	VENTS	VOC's (601-602 / 8021)	VOC's (62/0) LS (604	IDES (60	PCB's (608 / 8081)	SEMI-VOLATILES (8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020 / 8260)	RBCA - LEADED GAS EDB (8011) BTEX+N+M, EDC (8021 / 8260)	FUEL OI	MOTOR 220 / 8260 /ENTS (80	SEE ATTACHED UST	3			BER OF
LAB NUMBER	DATE	TIME	SAMPLE IDEN	ITIFICATION	WATER	SOIL	ОТНЕЯ	BTEX (CL. SOL	VOC's (GC-MS	PAH'S (82/0) PHENOLS (60	PESTIC	PCB's (SEMI-V	8 RCRA	RBCA -	RBCA - EDB (801 EDC (803	RBCA - BTEX (80	RBCA - BTEX (8C CL SOLV	SEE AT	1			NON
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30049	8/8/01	1430	42/4			X															X	4		1	1
30050	8/8/01	1435	8014			X															Х				
30051	77	1441	118/4			X															X				
1	8/8/01	1445	156/4			χ															Х				ľ
30053	8/8/01	1449	194/4			χ															Х	4			
300.54	8/8/01	1454	232/4			X															X	(
30055	1	1500	270/4			X															Х				
30056	·	1516	270/4d			X															X				1
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CITY PHON	*77 /	2000	STATE ZIP CO	DDE	М	ATF	XIX			•					TES	TS	(CIF	CLE	METH	OD)			.^			T
SAMPL	Tille	400 Lava MSO	meo Brod He Pryro number 3:003	ar					20)(+N+M)	CL. SOLVENTS (601 / 8010)	2 / 8021)	GC-MS VOC'S (624 / 8260) PAH's (8270 / 8310)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	55 (625 / 8270)	TCLP-(DESIGNATE ANALYSIS)	S	D GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	ILS (8270)	(8270)	mide	de cyample	100		NUMBER OF CONTAINERS
	Cha	ain of	Custody Form		ے ا		-	TPH - 8015 MOD TPH - 418.1	BTEX (602/8020)(LVENTS	VOC's (601-602 / 8021)	GC-MS VOCS (624) PAH's (8270/8310)	09) STC	CIDES (6	SEMI-VOI ATII ES /	DESIGN	8 RCRA METALS	- NO LEA	- LEADE	RBCA - FUEL OILS	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Cua	Amend	12		BER OF
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICAT	TION	WATER	SOIL	ОТНЕВ	TPH - 801	втех (CL. SC	S S	PAH's	PHEN	PESTIC	SEMI	TCLP.	8 RCR	RBCA BTEX+N	BTEX+N	RBCA BTEX (8	RBCA BTEX (8	THE PERSON NAMED IN	B	1/2	-	N ON
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CITY	<u>'311-2</u>	2000	FAX #2 77 2000	CODE	M	IATI	RIX								TE	STS	(CI	RCLE	METH	OD)						T
SAMPL	ER (S) MI CT OR SITE .	910 Ce La Imou	rango Brad P.N.J.P.O. NUMBE DN 33.00	Harr 3.5					BTEX (602 / 8020) (+N +M)	CL. SOLVENTS (601 / 8010)	/ 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	31)	SEMI-VOLATILES (625/8270)	S) GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	LS (8270)	OILS (8270)					NUMBER OF CONTAINERS
	Cha	ain of	Custody Form		-			TPH - 8015 MOD	602 / 802	LVENTS	VOC's (601-602 / 8021)	VOC's (PHENOLS (604 / 804	SIDES (60	PCB's (608 / 8081)	OLATILE	8 RCRA METALS	NO LEA	LEADED +M (8020).	RBCA - FUEL OILS BTEX (8020), PAH (8270)	HBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	3				BER OF
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICA	TION	WATER	SOIL	ОТНЕЯ	TPH - 8015	BTEX (CL SO	VOC's	GC-MS	PHENC	PESTIC	PCB's (SEMI-V	8 RCR	RBCA -	RBCA - LE BTEX+N+M EDC (8010)	RBCA -	RBCA - BTEX (8) CL. SOL	777				NON
30111	8/9/01	1303	FLSE84			X																Х				
30112	8/9/01	1325	EB02		Х						į											X]
30113	1	953	400M 270s/118			X																X				
30114		1400	TB		X	X						$\frac{1}{1}$										X		-		
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Relinquished	d By (Signatur	Vall	Date/Time	Received for I	аьб	rator							[] [[Qate	/Tim	7/		He Lat	eived el Tag	With So	eal Ir Agre	ntact? e?	0,	Yes Yes	Û No Û No
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NAME ATTEN ADDRE	Somy	to F nut of & Ha	Istaris Environ		taO CODE	_	ئنسم	<u></u>				Ĝ		Y	Λ ΑΕ					V	S	- -	104 V Boise	Wes	 t 31s aho	orc. st Stre 837 336-	eet 14	s, Inc	: <u>.</u>
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SAMPL	ERI(S). YE CT OR SITE WLLL	amo		1-292 Vad 1 P.N./P.O. NUME 33. UO					20		BTEX (602 / 8020) (+N+M)	CL. SOLVENTS (601 / 8010)	VOC'S (601-602 / 8021) GC-MS VOC'S (624 / 8260)	PAH's (8270 / 8310)	PHENOLS (604 / 8040 / 8270)	006 / 006 I / 62 / U)	SEMI-VOLATILES (625/8270)	TCLP-(DESIGNATE ANALYSIS)	AD GAS	BTEX+N+M (8020)	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	RBCA - FUEL OILS	RBCA - MOTOR OILS	H (8270) (8010)					NUMBER OF CONTAINERS
	Cha	ain of	Custody	Form	•				1015 MC	18.1	602 / 8	CVENT	001-601-601-601-601-601-601-601-601-601-	8270 /)LS (60	608 / 8	OLATI	DESIG	NO	+M (802	LEADE +M (802 10)	FUEL	MOTO	SOLVENTS (8010)	B				BER O
LAB NUMBER	DATE	TIME	SAMP	LE IDENTIFIC	ATION		SOIL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TPH - 8015 MOD	TPH - 418.1	BTEX (S S	OC-MS	PAH's (PHENC	PCB's (608 / 8081)	SEMI-V	TCLP-(I	BCA.	BTEX+N	RBCA - LE BTEX+N+M EDC (8010)	RBCA -	RBCA -	BTEX (8)	4				NOW
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NAME ATTEN	Horas !	to i	Astaris ict Environm	uental	,	شكر	9)				Ţ		Λ A	7	7			7	7	•		hem Wes) s, Inc	<u>2.</u>
ADDRE	Brace	X Ho		CODE	M	ATF	alx					7	A								Bois	se, Id	laho	837	14	2	1
SAMPL PROJE	Tille	2900 Lava emso		9 21 3.5				5	320)(+N+M)	S (601 /8010)	VOC's (601-602 / 8021)	(624 / 8260)	PHENOLS (604 / 8040 / 8270)	8081 / 8270)	625 / 8270)	т т			:D GAS)), EDB (8011)		H OILS	4 (8270) 8010)					NUMBER OF CONTAINERS
LAB NUMBER	Cha	ain of	Custody Form SAMPLE IDENTIFICATION	ATION	WATER	SOIL	OTHER TRU 8015 MOD	TPH - 418.1	BTEX (602 / 8020) (+N +M)	CL. SOLVENT	VOC's (601-60	GC:MS VOC'S (624 / 8260) PAH's (8270 / 8310)	PHENOLS (60	PESTICIDES (SEMI-VOLATILES (TCLP (DESIGN	8 RCRA META	RBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011)	RBCA - FUEL OILS	BTEX (8020), PAH (8270) RBCA - MOTOR OILS	BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	The Car				NUMBER OF
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30080	8/9/01	958	270/1576			X											-						χ χ				
1	8/9/01 8/9/01	1008	308/42 308/80			X X						-			-		-						X		-		
30083	8/9/01 REI	1023 Inquished	308/118 BY (Signature)	DATE		X			TIM	E								REC	EIVE	D BY	(Sig	natur	(e)				
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NAME ATTEN ADDRE	Brace	Hstar ut En L Har	es Ivironmen r	ISTATE ZIP CO	7-97		·				and the second		Service State of the Service S	\ L <i>p</i>	(B)	OR	I- AT	[E	RIE	/ s		10 Bc	chem 04 Westoise, lo	st 31 dahc	st Str 837	eet 14		<u>.</u>	
PHONE	ENGLY L CTOPSTE. VULLAR	arang	FAX* 37 Bra	7-2929 d Harr P.N./P.O. NUMBER 33.003.		. M.	ATF		15 MOD	BTEX (602 / 8020) (+N +M)	VENTS (601 / 8010)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	PAH'S (8270 / 8310) PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)		TCLP-(DESIGNATE ANALYSIS)	T		RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011)			RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Cd				NUMBER OF CONTAINERS	
LAB NUMBER	DATE	TIME	SAMF	LE IDENTIFICA	NON	WATER	SOIL	ОТНЕЯ	TPH - 8015 MOD	BTEX (6	CL. SOL	VOC's (GC-MS	PAH'S (PESTICI	PCB's (TCLP-(D	8 RCRA	RBCA - PBTEX+N+	RBCA - L BTEX+N+	RBCA - FL	BTEX (802	RBCA - I BTEX (802 CL. SOLVI	111				NUMB	
30039	8/8/01	1548	4/2325	_			Х																	X				1	
30040	8/8/01	1606	42/42				χ																	X					_
30041	8/8/9	1609	42/80	·			X																	X					
	8/8/01		42/118				χ																	X					
	8/8/01		42/156				χ										T							χ					
I	8/8/01		42/194				χ																	Υ					
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	8/8/01		42/270		· · · · · · · · · · · · · · · · · · ·		X												-					X					
30047	8/8/01	1648	80/42				X																	X				1	
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SAMPL	CT OB SITE	Laro Laro MSD	ingo Brida H	1/2 5				015M)	BTEX (602/8020/8260) (+N+M)	CL. SOLVENTS (601 / 8010)	/ 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	PCB's (608 / 8081) SEMI-VOI ATILES (625 / 8270)	VTE VTE	S	D GAS / 8260)	GAS (+N+M,	ILS		UIST					NUMBER OF CONTAINERS
	Cha	ain of	Custody Form					TPH - (418.1 / 8015M)	602 / 80; I)	VENTS	VOC's (601-602/8021)	VOC'S	(S) (604)	IDES (60	PCB's (608 / 8081)	TCLP-(DESIGNATE	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020 / 8260)	LEADEC 11) BTEX 21/8260	RBCA - FUEL OILS BTEX (8020 / 8260), PAH	RBCA - MOTOR OILS BTEX (8020 / 8260), PAI CL. SOLVENTS (8010)	SEE ATTACHED LIST	Ca			1	BER OF
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICA	TION	WATER	SOIL	OTHER	TPH-(BTEX ((+N+N	CL. SOI	VOC's (GC-MS VOC's	PHENO	PESTIC	PCB's (TCLP-(I	8 RCRA	RBCA -	RBCA - LEADED GAS EDB (8011) BTEX+N+M, EDC (8021 / 8260)	RBCA -	RBCA - BTEX (8 CL. SOL)	SEE AT	111				E S S S
36057	8/8/01	1503	308/4			Х																	Х				
30058	· '	1505	346/4			X																	X			1	
30059		1570	384/4			X																	X				
30060		1522	4/42			X																	X				
30061	''	1530	4/80			X																	X				
30062	8/8/01	1532	4/118			X																	X				
30063		1535	4/156			X													!				X			\prod	
30064	8/8/01	1542	4/194			X																	X				
30065	E/8/01	1548	4/232			X	,														<u> </u>		X			1	,
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PHONE	277-	2000)	FAX #277 - 2000	P CODE	M.	ATE	RIX						,		TES	STS (CIR	CLE	METH	OD)							
SAMPL PROJS	Clike	1900 Lan	Mes Brad P.N.J.P.O. NUM 23. OU	Hun 193.5					BTEX (602 / 8020) (+N +M)	(601 / 8010)	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260)	PHENOLS (604 / 8040 / 8070)	PESTICIDES (608 / 8081 / 8270)	PCB's (608 / 8081) SEMI-VOL ATILES (625 / 8270)	TCLP-(DESIGNATE ANALYSIS)	S	D GAS	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	ILS (8270)	(9270) (9270)	(S)				NUMBER OF CONTAINERS	211111111111111111111111111111111111111
	Cha	ain of	Custody Form)	_ a		ОТНЕЯ	8015 MO	(602 / 80	DLVENTS	(601-602	S VOC's	PHENOLS (604 / 804	CIDES (6	PCB's (608 / 8081)	(DESIGN	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	- LEADEI N+M (8020 010)	RBCA - FUEL OILS	RBCA - MOTOR OILS BTEX (8020), PAH (8270)	1 08				ABER OF	; ; 2
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFIC	CATION	WATER	SOIL	P	TPH - 8015	BTEX	2. S	NOC's	GC-M	PHEN	PESTI	PCB's	TCLP.	8 RCH	RBCA BTEX+ℓ	RBCA BTEX+	RBCA	BTEX (F				Ş	
3006	8/8/01	1653	20/80			X							_									X				1	
30067	8/8/01	1656	80/118			X				ļ.,										ļ		X					
30068	8/8/01	1658	80/156			X																X			·		
30069	8/8/01	1704	118/42		ļ	X																X					
30070	8/8/01	1709	118/80			χ																X			_		
30071	2/8/01	1714	118/118			X														<u> </u>		X					
30072	8/8/01	1724	118/194			X						_										X					
30073	8/8/01	1735	EBOI		X.				<u> </u>													X					·
30079	8/9/01	819	156/42	·		X																X				JV	
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SAMPL	2//- ER (S)(UL)*	2401) e La moor	1977-1979 1909 Brod H 1918-190 NUMBER 133.003	3.5						8020) (+N +M)	CL. SOLVENTS (601 / 8010)	OC. 8 (601-602 / 8021)	310)	PHENOLS (604 / 8040 / 8270)	8 / 8081 / 8270)	SEMI-VOLATILES (625/8270)	TCLP-(DESIGNATE ANALYSIS)	(0)	GAS .	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011)	0	(8270)	OILS (8270)						NUMBER OF CONTAINERS
	Cha	ain of	Custody Form	·	r-		-	TPH - 8015 MOD	118.1	602 / 802	CVENTS	VOC'S (601-602 / 8021)	PAH's (8270/8310)	JLS (604	JOES (80	SEMI-VOLATILES (DESIGNA	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	LEADED	() [1]	BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	3					BER OF
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICA	TION	WATER	SOL	PH-P	TPH -	TPH - 418.1	BTEX (602 /	S S		PAH's	PHEN	FES ES	SEMI-	TĊLP-(8 RCR.	RBCA BTEX+N	RBCA BTEX+N	EDC (8010)	BTEX (8	RBCA BTEX (8 CL. SOL	月					N N
30102	8/9/01	822	156/80			X																		X					1
30/03	8/9/01	825	156/118			X																		X	_				<u> </u>
30104	8/9/01	828	156/156			Х										L							· 	X				1	
30105	8/9/01	832	194/42			X	-				_	_		_										X			_	_	
30106	8/9/01	836	194/80			X	-					_			-							_		X			_	_ _	1
30107	8/9/01	840	194/11B		-	X	_					-									_	_		X	_	 	_		_
30108	8/9/01	845	194/156			X																		X			_		_
30109	8/9/01	849	232/42			X																		X			_		·
30110	8/9/01	854	232/80	····		X												.						X				N	Ŀ
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PHONE SAMPL PROJE	311-7 Like Julia	2900 Laxa nusor	Ingo Brad to PN./BO NUMBER 33. CP	ar 3.5					BTEX (602 / 8020) (+N +M)	CL. SOLVENTS (601 / 8010)	/ 8021)	GC-MS VOC's (624 / 8260)	/8040 /8270)	PESTICIDES (608 / 8081 / 8270)	PCB's (608 / 8081) SEMI-VOLATILES (625 / 8270)	TCLP-(DESIGNATE ANALYSIS)	S C) GAS	HBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	LS (8270)	OILS (8270)					NUMBER OF CONTAINERS
	Cha	ain of	Custody Form				ОТНЕЯ	8015 MOL	(602 / 802	CLVENTS	VOC's (601-602/8021)	GC-MS VOC's (624 / PAH's (8270 / 8310)	OLS (604	CIDES (60	PCB's (608 / 8081) SEMI-VOLATILES ((DESIGNA	8 RCRA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	- LEADEC V+M (8020). 010)	RBCA - FUEL OILS BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	Cal				ABER OF
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICA	TION	WATER	SOIL	OTHE	TPH - 418	BTEX	CL. SC	s.oon	GC-M	PHEN	PESTI	PCB's SEMI-	TÖLP.	8 PCF	HBCA BTEX+I	BTEX+/	RBCA BTEX (8	RBCA BTEX (I	4				NC
30093	8/9/01	1158	384/156			χ										-						X				
30094	8/9/01	1203	384/194			X																X				
30095	8/9/01	1214	118/156			χ																X				
30094	8/9/01	1248	FLSW83			X					·		,						i			X				
30097	' '		FLW 116	·		χ																X				
30098	819/01	1255	RE 43			X																X				
30099	8/9/01	1255	FLES 43			χ																χ	-			
30100	•	1309	TS 101			X																X				
1	8/9/01	1319	TSDIOI			X																X				
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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33 SOURCE: SF MATRIX: SOIL DATE COLLECTED: 09/25/01

TIME COLLECTED:

9:45

DATE RECEIVED: DATE REPORTED: 09/26/01 10/10/01

LABORATORY SAMPLE NUMBER: 32295

PERCENT MOISTURE:

15.5%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/5/2001

LB

0.70



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 85/89 MATRIX: SOIL

DATE COLLECTED: 09/25/01

TIME COLLECTED:

11:30 09/26/01

DATE RECEIVED: DATE REPORTED:

10/10/01

LABORATORY SAMPLE NUMBER: 32296

PERCENT MOISTURE:

16.3%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/5/2001

LB

143.0





104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 85/89S MATRIX: SOIL

DATE COLLECTED: 09/25/01

TIME COLLECTED:

11:30

DATE RECEIVED: DATE REPORTED: 09/26/01 10/10/01

LABORATORY SAMPLE NUMBER: 32297

PERCENT MOISTURE:

16.1%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/5/2001

LB

104.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 237/51 MATRIX: SOIL DATE COLLECTED: 09/25/01

TIME COLLECTED:

14:20

DATE RECEIVED:

09/26/01

DATE REPORTED:

10/19/01

LABORATORY SAMPLE NUMBER: 32302

PERCENT MOISTURE:

12.9%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/15/2001

LB

<0.06





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 123/13 MATRIX: SOIL DATE COLLECTED: 09/25/01

TIME COLLECTED:

13:50

DATE RECEIVED:

09/26/01

DATE REPORTED:

10/19/01

LABORATORY SAMPLE NUMBER: 32300

PERCENT MOISTURE:

15.0%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/15/2001

LB

526.0





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 4111

POCATELLO, IDAHO 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 161/89 MATRIX: SOIL

DATE COLLECTED: 09/25/01

TIME COLLECTED:

13:20

DATE RECEIVED: DATE REPORTED: 09/26/01 10/16/01

LABORATORY SAMPLE NUMBER: 32299

PERCENT MOISTURE:

16.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/12/2001

LB

< 0.06



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

CORRECTED LABORATORY REPORT

ASTARIS

PO BOX 4111

POCATELLO, ID 83205

PROJECT: WILLIAMSON

PN: #33

SOURCE: 123/51 MATRIX: SOIL DATE COLLECTED: 09/25/01 TIME COLLECTED: 14:00 DATE RECEIVED: 09/26/01 DATE REPORTED: 10/16/01

LABORATORY SAMPLE NUMBER: 32301

PERCENT MOISTURE: 19%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/12/01

LB

921.0





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

DATE COLLECTED:

09/25/01

P.O. BOX 4111

TIME COLLECTED: DATE RECEIVED:

12:40 09/26/01

POCATELLO, IDAHO 83205

DATE REPORTED:

10/16/01

PROJECT: WILLIAMSON

PN: #33

SOURCE: STR MATRIX: SOIL

LABORATORY SAMPLE NUMBER: 32298

PERCENT MOISTURE:

20.6%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

10/12/2001

LB

211.0



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

ASTARIS - PAGE 2

LAB SAMPLE NUMBERS: 32295 - 32302

SAMPLE SPIKE DATA (LABORATORY FORTIFIED SAMPLE MATRIX)

ANALYTE	DATE		SPIKE TRUE VALUE (ppm)	SPIKE RESULT	PERCENT RECOVERY	METHOD ACCEPT.
Cadmium	10/5/2001	31429	1.00	0.910	91%	75 - 125 %
	10/12/2001	31429	1.00	0.903	90%	75 - 125 %
	10/15/2001	32302	1.00	0.886	89%	75 - 125 %

SAMPLE DUPLICATE DATA

			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•		
ANALYTE	DATE	SAMPLE NUMBER	VALUE (mg/L)	DUPLICATE (mg/L)	RELATIVE % DIFF.	ACCEPT. LIMITS
Cadmium	10/5/2001	32295	0.0059	0.0059	<1%	20%
	10/12/2001	32299	<0.0005	<0.0005	<1%	20%
	10/15/2001	32302	<0.0005	<0.0005	<1%	20%







104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY QA/QC REPORT

ASTARIS P.0. BOX 4111 POCATELLO, IDAHO 83205

PROJECT: WILLIAMSEN SITE

PN: 33

LAB SAMPLE NUMBERS: 32295 - 32302

TESTING METHODOLOGIES

ANALYTE	DATE ANALYZED	ANALYST	METHOD	METHOD DETECTION LEVEL
Cadmium	10/5/2001	LB	SW 846 1311	0.0005
	10/12/2001	LB	SW 846 1311	0.0005
	10/15/2001	LB '	SW 846 1311	0.0005

^{*} Sample was digested using method EPA 3015.

QUALITY CONTROL SAMPLE - IPC (INSTRUMENT PERFORMANCE CHECK) OR ICV (INITIAL CALIBRATION VERIFICATION)

ANALYTE	DATE	IPC/ICV TRUE VALUE (mg/L)	IPC/ICV RESULT (mg/L)	PERCENT RECOVERY	METHOD ACCEPTANCE
Cadmium	10/5/2001	0.300	0.274	91%	90 - 110 %
	10/12/2001	0.300	0.292	97%	90 - 110 %
	10/15/2001	0.300	0.286	95%	90 - 110 %

LABORATORY REAGENT BLANK (LRB) AND FORTIFIED (SPIKED) LABORATORY REAGENT BLANK (FLRB)

ANALYTE	DATE	LRB (mg/L)	FLRB TRUE VALUE (mg/L)	FLRB RESULT	PERCENT RECOVERY
Cadmium	10/5/2001	< 0.0005	1.00	0.90	90%
	10/12/2001	< 0.0005	1.00	0.92	92%
[.	10/15/2001	< 0.0005	1.00	0.92	92%



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ADDRE	ZAMMI TION BRAN ESS	t Envi	'lanmen 4 i z	, Inc.				, i e i e					Y	Λ LA	L(30	C R	H	□ DRI	V ES		10 Bo	O4 Westoise, Ichone (st 31 dahc	st Str 837	eet 14	,	<u>:-</u>
CITY			Y	TATE ZIP CO	1	М	ATF	RIX								TES	rs (C	iRCL	E M	METHO	(D)						
SAMPLI	208, ER (SV/1)	377.29	FAX JOP.	377.29.	29	-			T	=	l _a			ĝ	(270)	023	SIS)					-	V	T		\prod	RS.
PROJEC	CT OR SITE	e LAGI	MGO	N. / P.O. NUMBER						N+ N+)	1 / 801	21)	9580	740 / 85	8081 / 6	625 / 8	ANALY	AS	0	8 (8011)	6	ν, ()	1				TAINE
			Custody I			٠		ОТНЕЯ	8015 MOD	(602 / 8020) (+N+M	CL. SOLVENTS (601 / 8010	VOC's (601-602 / 8021)	GC-MS VOC's (624 / 8260) PAH's (8270 / 8310)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	SEMI-VOLATILES (625/8270)	TČLP-(DESIGNATE ANALYSIS)	BBCA - NO LEAD GAS	4+M (8020)	BTEX+N+M (8020), EDB (8011) EDC (8010)	RBCA - FUEL OILS BTEX (8020), PAH (827	CA - MOTOR OILS IX (8020), PAH (8270) SOLVENTS (8010)	ADMILLE				NUMBER OF CONTAINERS
LAB NUMBER	DATE	TIME	SAMPLE	IDENTIFICAT	ION	WATER	SOIL	ОТНЕ	TPH - 8015	BTEX (602	CL. SC	S,OOA	GC-MS PAH's	PHEN	PESTI	SEMI	TCLP-	ABCA	BTEX+N	BTEX+	RBCA BTEX (8	RBCA BTEX (6 CL. SOL	3				NO.
32295	9/25/4	9:45	SF				X																X				1
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2297		11:30	85/895				X																X				1
2298		12:40	STR				¥																X				1
3299		13:20	161/89		·:		V																t				1
2300	7	13:50	123/13				X														,		8				1
32301	4	14:00	123/51				*																6				/
32302	1	14:20					r																x				/
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	REI	LINQUISHED	BY (Signature)		DATE				 -	TIM	E							R	ECE	IVED	BY (S	Ignatui	re)				
1/4	M	my 1	nts some C	XXX	9/05/6	5/			/5	- / > ·(<u> </u>	<u>ა</u>															
																						<u>-</u>					
Relinquished	d By (Signatu	ıre)	Date/	Time	Received for L						_	•	9	1/2		ate/T		37	<u>C</u>			With Se , COC A			□ Ye □ Ye		



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

SUMMIT ENVIRONMENTAL 795 SOUTH ORCHARD

BOISE, IDAHO

83705

DATE COLLECTED - - -11/14/2001

TIME COLLECTED - - -11:30

DATE RECEIVED - - - 12/12/2001

DATE REPORTED - - - 12/20/2001

SUBMITTED : BRAD HARR

ATTENTION: BRAD HARR

SOURCE -: 118/42 @ 3' (BELOW TOP AC) #34865 / SOIL

LAB SAMPLE NUMBER - 35866

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

7.88

12/18/2001

SQ

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.

Suzanne Howell

Laboratory Manager





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

SUMMIT ENVIRONMENTAL 795 SOUTH ORCHARD

BOISE, IDAHO

83705

DATE COLLECTED - - -11/14/2001

TIME COLLECTED - - -11:30

DATE RECEIVED - - - 12/12/2001

DATE REPORTED - - - 12/20/2001

ATTENTION: BRAD HARR SUBMITTED : BRAD HARR

SOURCE -: 118/4 @ 3' (BELOW TOP AC) #34866 / SOIL

LAB SAMPLE NUMBER - 35867

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS

RESULTS

DATE ANALYZED

ANALYST

pH (SU)

8.30

12/18/2001

SQ

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

SUMMIT ENVIRONMENTAL ATTENTION: BRAD HARR 795 SOUTH ORCHARD BOISE, IDAHO 83705

DATE COLLECTED:

11/14/01

TIME COLLECTED:

11:30

DATE RECEIVED: DATE REPORTED: 11/19/01 12/06/01

PROJECT: WILLIAMSON

SOURCE: 118/4 @ 3' (BELOW TOP OF AC)

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

34866

PERCENT MOISTURE: 13.2%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

11/29/2001

LB

157.0



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

SUMMIT ENVIRONMENTAL ATTENTION: BRAD HARR 795 SOUTH ORCHARD BOISE, IDAHO 83705

DATE COLLECTED:

11/14/01

TIME COLLECTED: DATE RECEIVED:

11:30

11/19/01

DATE REPORTED:

12/06/01

PROJECT: WILLIAMSON

SOURCE: 118/42 @ 3' (BELOW TOP OF AC)

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

34865

PERCENT MOISTURE: 14.8%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

11/30/2001

LB

5,220.0

NAME ATTER	XIIIIII VIONE VISINAD	+ Envi	Cin men	£1,	In.	7.6	7									A.A.E		C R	E ATT	E Ol	I)			10 Bo	chem 14 West bise, lo	st 31	 1st St 5 83	ree! 714	t	ic.
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SAMPI	LER (S)				P.O. NUMBER) (+N +M)	601 / 8010)	8021)	10)	PHENOLS (604/8040/8270)	PESTICIDES (608 / 8081 / 8270)	SEMI-VOLATILES (625 / 8270)	TCLP-(DESIGNATE ANALYSIS)		GAS	3AS :DB (8011)	U	270))(L.S 270) 0)	in				NUMBER OF CONTAINERS
			Custo	dy Fo	orm		-	e:		OTHER TPH - 8015 MOD	418.1	BTEX (602/8020)(CL SOLVENTS (601 / 8010)	VOC's (601-602 / 8021) GC-MS VOC's (624 / 8260)	PAH's (8270 / 8310)	IOLS (604 /	PESTICIDES (608 /	VOLATILES	-(DESIGNAT	AA METALS	RBCA - NO LEAD GAS BTEX+N+M (8020)	RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011)	(2) - El IEl Oll	BTEX (8020), PAH (8270)	RBCA - MOTOR OILS BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	CARMIL				MBER OF C
LAB NUMBER	DATE	TIME		AMPLE IDE	NTIFICAT	ION		WATE	SOIL	OTHER TPH - 80	TPH - 418	BIEX	S C		PAH	F.	PESI	SEMI	TÜLP	8 RCI	RBC/	RBCA BTEX	EDC (8		P E C	H			Ц	2
34865 34864	11/14/01	11:30	118/42	03	(below	w top of	FAC)		X																	1				1
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Relipevishe	od By (Signate)	PRESS re)	5 (sea	Date/Time	9 	Receive	d for La	bora	atory	/ <i>Ы</i> / Ву () natur	e)		1		Di	ate/	ime	9	3	/_			14 1611 So			<u> </u>		C) No
Bus	of los	Mary	. 11/19		49		ao								1.	//19					19		bel :	ved \ Tag,	With Se COC A	aı ın Agre	nact? 9?	X.	Yes	□ No



APPENDIX 10

2000 - 2001 Transport / Disposal Summary

		or mansports	-
Manifest #	DATE	Pounds	Tons
1	12/8/2000	69,860	34.93
2	12/8/2000	62,140	31.07
. 3	12/11/2000	78,760	39.38
4	12/11/2000	78,820	39.41
5	12/11/2000	76,480	38.24
6	12/11/2000	68,260	34.13
7	12/11/2000	87,620	43.81
8	12/11/2000	62,860	31.43
9 -	12/11/2000	56,780	28.39
10	12/11/2000	58,520	29.26
11	12/11/2000	63,440	31.72
12	. 12/11/2000	74,500	37.25
13	12/12/2000	60,960	30.48
14	12/12/2000	67,720	33.86
15	12/12/2000	63,980	31.99
16	12/12/2000	67,560	33.78
17	12/12/2000	62,420	31.21
18	12/12/2000	54,860	27.43
19	12/12/2000	61,760	30.88
20	12/12/2000	62,180	31.09
21	12/12/2000	66,700	33.35
22	12/12/2000	65,460	32.73
23	12/13/2000	65,740	32.87
24	12/13/2000	70,520	35.26
25	12/13/2000	70,720	35.36
26	12/13/2000	70,880	35.44
27	12/13/2000	70,640	35.32
28	12/13/2000	67,480	33.74
29	12/13/2000	67,980	33.99
. 30	12/13/2000	64,880	32.44
31	12/13/2000	66,240	33.12
32	12/14/2000	68,160	34.08
33	12/14/2000	61,840	30.92
34	12/14/2000	67,500	33.75
35	12/14/2000	65,760	32.88
36	12/14/2000	66,820	33.41
37	12/14/2000	62,820	31.41
38	12/14/2000	73,860	36.93
39	12/14/2000	64,240	32.12
40	12/14/2000	63,620	31.81
41	12/14/2000	72,500	36.25
42	12/15/2000	65,680	32.84
43	12/15/2000	75,900	37.95
44	12/15/2000	62,100	31.05
45	12/15/2000	66,840	33.42
46	12/15/2000	66,380	33.19
47	12/15/2000	73,180	36.59
48	12/15/2000	70,300	35.15
49	12/15/2000	66,840	33.42
50	12/15/2000	65,020	32.51
51	12/15/2000	63,840	31.92



	•	·	•
52	12/15/2000	65,620	32.81
53	12/16/2000	72,420	36.21
54		·	
	12/16/2000	74,660	37.33
55	12/16/2000	75,540	37.77
56	12/16/2000	63,980	31.99
57	12/16/2000	66,900	33.45
58	12/16/2000	73,860	36.93
59	12/16/2000	72,240	36.12
60	12/16/2000	61,420	30.71
61	12/16/2000	71,140	35.57
62	12/16/2000	67,720	33.86
63	12/18/2000		34.96
		69,920	
64	12/18/2000	70,480	35.24
65	12/18/2000	64,540	32.27
66	12/18/2000	67,740	33.87
67	12/18/2000	63,000	31.50
68	12/18/2000	74,560	37.28
69	12/18/2000	61,340	30.67
70	12/18/2000	58,440	29.22
71	12/18/2000	61,200	30.60
72	12/18/2000	66,300	33.15
73	12/19/2000	61,340	30.67
74			
	12/19/2000	66,260	33.13
. 75	12/19/2000	66,060	33.03
76	12/19/2000	68,620	34.31
77	12/19/2000	70,700	35.35
78	12/19/2000	63,680	31.84
79	12/19/2000	59,300	29.65
80	12/19/2000	64,060	32.03
81	12/19/2000	66,900	33.45
82	12/19/2000	64,860	32.43
83	12/20/2000	69,800	34.90
84	12/20/2000	69,100	34.55
85	12/20/2000	64,160	32.08
86	12/20/2000	70,520	35.26
87	12/20/2000	68,620	34.31
88	12/20/2000	69,920	34.96
89	12/20/2000	_62,160	31.08
90	12/20/2000	63,640	31.82
91	12/20/2000	63,860	31.93
92	12/20/2000	67,120	33.56
93	12/21/2000	71,200	35.60
94	12/21/2000	67,560	33.78
95	12/21/2000	65,300	32.65
96	12/21/2000	64,580	32.29
97	12/21/2000	71,280	35.64
		· · · · · · · · · · · · · · · · · · ·	
98	12/21/2000	75,100	37.55
99	12/21/2000	61,620	30.81
100	12/21/2000	60,960	30.48
101	12/21/2000	65,840	32.92
102	12/22/2000	69,740	34.87
103	12/22/2000	66,200	33.10

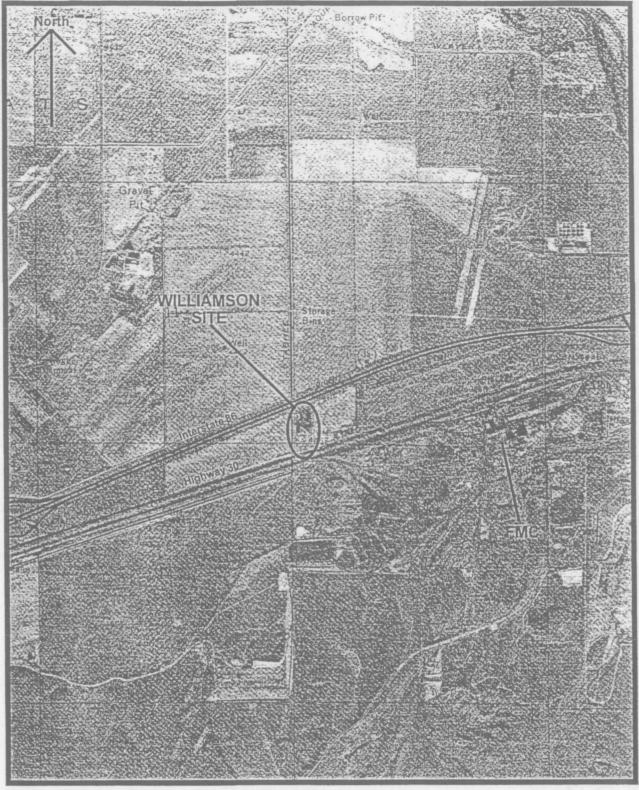
Williamsen/Tesco Cleanup - 2000-2001 Transport/Disposal Summary

104	12/22/2000	68,080	34.04
105	12/22/2000	60,360	30.18
106	12/22/2000	8,220	4.11
Subtotal	2000	7,049,660	3524.83
Manifest #	DATE	Pounds	Tons
107	8/6/2001	69,040	34.52
108	8/6/2001	64,060	32.03
109	8/6/2001	65,280	32.64
110	8/6/2001	61,300	30.65
111	8/8/2001	75,260	37.63
112	8/8/2001	66,420	33.21
113	8/8/2001	75,260	37.63
114	8/8/2001	61,280	30.64
115	8/7/2001	72,160	36.08
116	8/7/2001	79,460	39.73
117	8/7/2001	67,540	33.77
118	8/7/2001	73,280	36.64
119	8/7/2001	58,720	29.36
120	8/8/2001	77,160	38.58
121	8/8/2001	58,180	29.09
122	8/8/2001	50,620	25.31
123	8/9/2001	69,500	34.75
124	8/9/2001	69,500	34.75
125	8/9/2001	64,940	32.47
126	8/9/2001	65,840	32.92
127	8/9/2001	70,440	35.22
128	8/10/2001	66,660	33.33
129	8/10/2001	79,060	39.53
130	8/10/2001	79,200	39.60
131	8/10/2001	68,680	34.34
132	8/10/2001	68,880	34.44
133	9/26/2001	66,800	33.40
134	9/26/2001	68,620	34.31
135	9/26/2001	66,500	33.25
136	9/26/2001	65,680	32.84
137	2/27/2001	65,740	32.87
138	9/27/2001	67,720	33.86
139	10/3/2001	84,400	42.20
140	10/3/2001	68,460	34.23
141	10/4/2001	73,400	36.70
142	10/24/2001	34,960	17.48
143	10/24/2001	18,020	9.01
144	10/24/2001	48,880	24.44
Subtotal	2001	2,506,900	1,253
TOTAL	•	9,556,560	4,778

source: Rob Hartman, FMC

APPENDIX 11

Class V Injection Well Figures



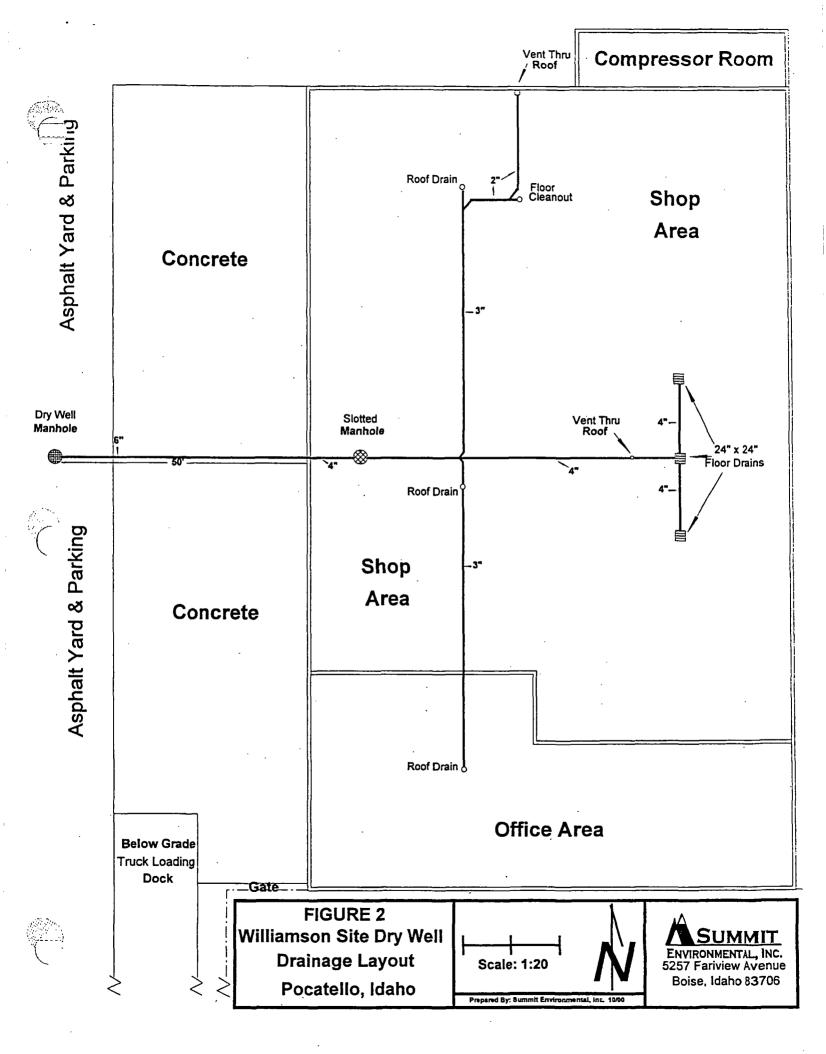
Source: USGS, 1985, Michaud Quadrangle, Idaho, 7.5 Minute Series (Orthophotoquad), Menlo Park, CA: U.S. Geological Survey.

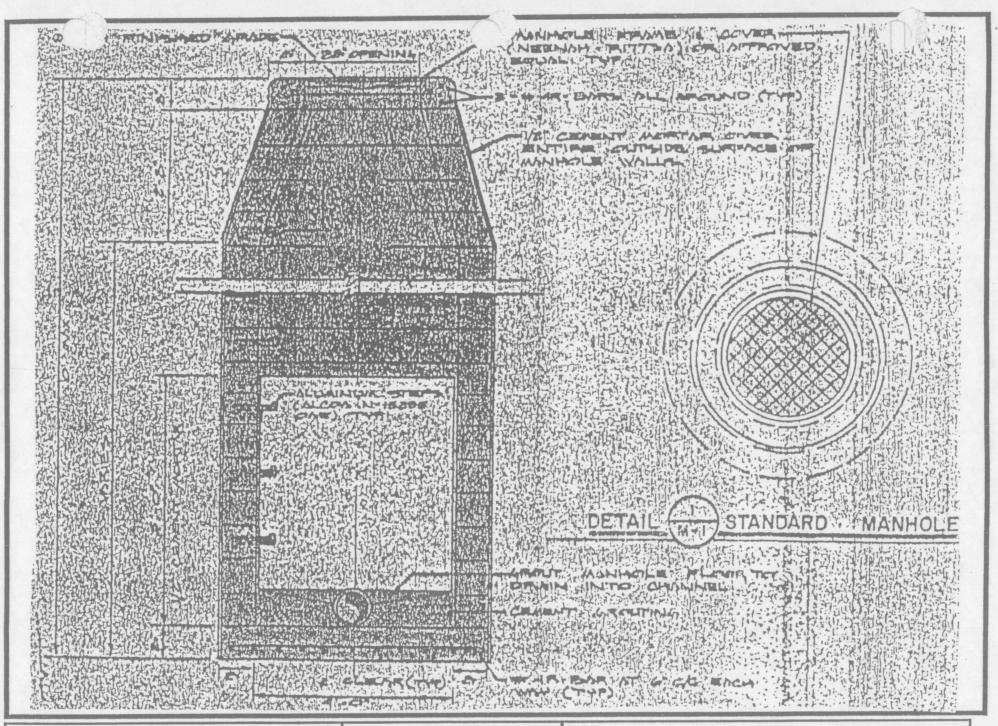
O Scale 0.5 miles



5257 FAIRVIEW AVE., STE 260 Boise, Idaho 83706 208.377.2900 FIGURE 1: VICINITY MAP
Williamson Site
1297 Highway 30 West of Pocatello
Pocatello, Idaho

Created by: Summit Environmental, Inc. 5/00



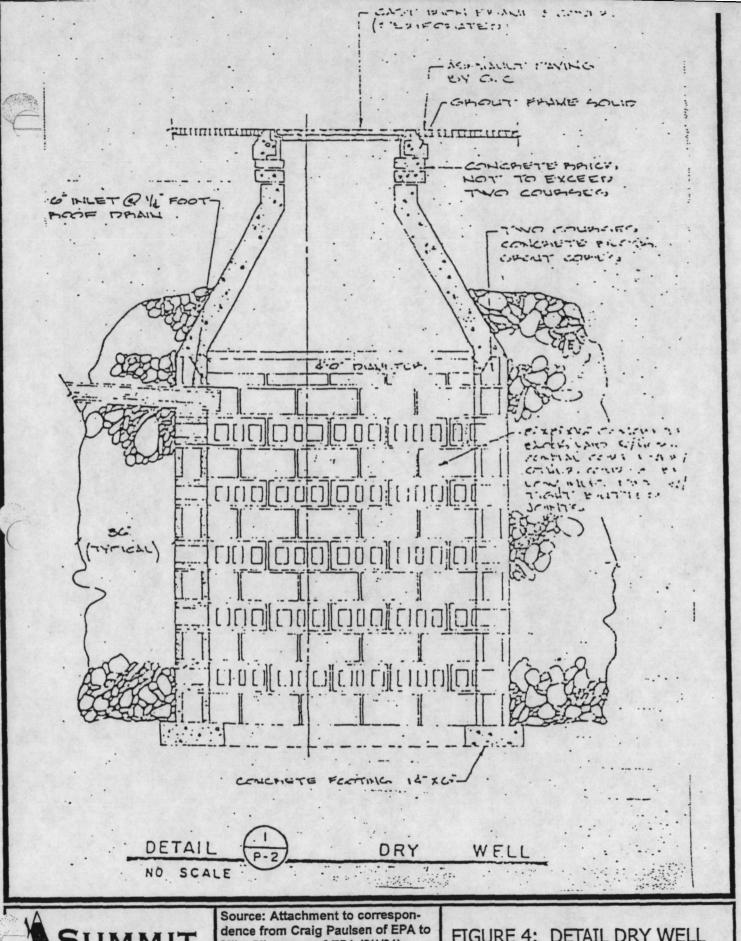




5257 FAIRVIEW AVE., STE 260 Boise, Idaho 83706

Source: Adamson Engineering, Ogden, Utah Sheet M-1 Site Plan Drawing, December 9, 1976 Created by: Summit Environmental, 10/00

FIGURE 3: DETAIL STANDARD SHOP MANHOLE Williamson Site Pocatello, Idaho



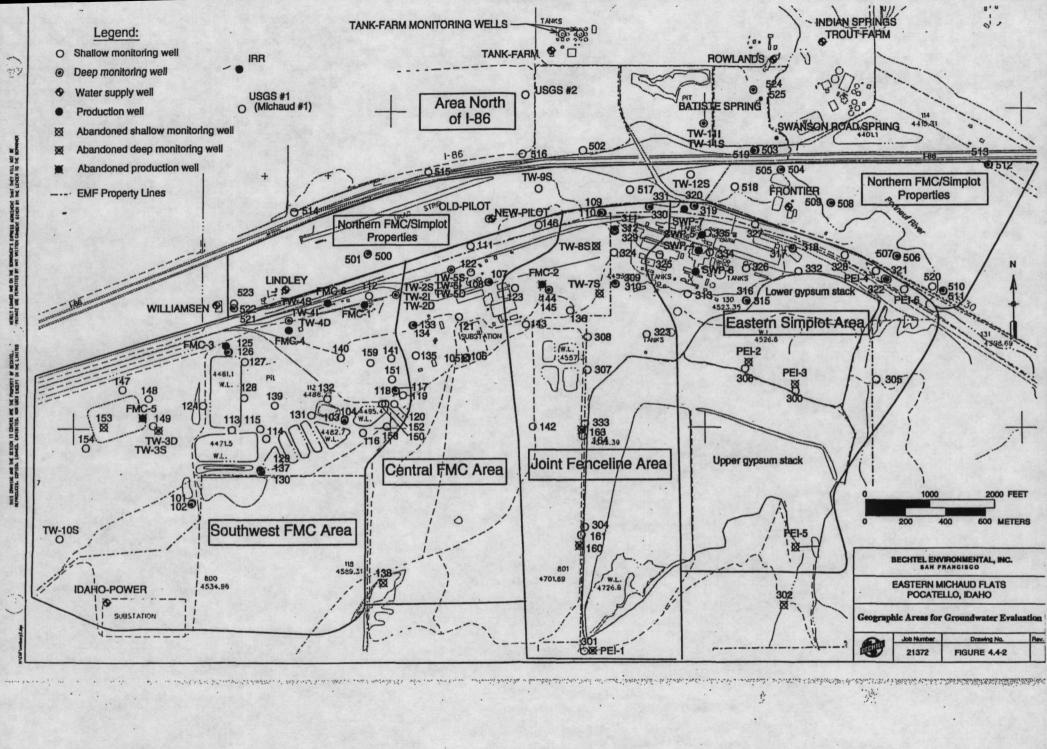
ENVIRONMENTAL, INC. 5257 FAIRVIEW AVE., STE 260 Boise, Idaho 83706 208.377.2900

Mike Silverman of EPA (8/1/91). Drawing supplied to Mr. Paulsen from Mr. Elias of AEI Enterprises Inc., a former tenant.

Created by: Summit Environmental, 10/00

FIGURE 4: DETAIL DRY WELL Williamson Site Pocatello, Idaho

DEPTH NEET OF SAMPLE IDITIME WELL DIAGRAM/BOREHOLE NOTES DEV WELL EXCHAPTION MAN/FOLD CONCRETE COLUMN GRAY SLAG STRECTO PRIVILE BLOCKT GRAY SLAG STRECTO PRIVILE GRAY SLAG STRECTO PRIVILE GRAY SLAG		U) Eng	inee	r	NA NA NA	Project Williamsen Siz Dav WELL ID # / Diameter N/A N/A Depth Day Welc ~ 5' Deep Date Started 8/1/02 Approved By:
MANIFOLE CONCRETE COLUMN CONCRETE COLUMN CONCRETE COLUMN STRECTED PRINTIE STREC	DEPTH	SAMPLE	N-VALUE	MVO		WELL DIAGRAM / BOREHOLE NOTES
12 SAMPLE COLLEGIO	2-					MANIFOLE CONCRETE COLLIR CONCRETE COLLIR STRECTED Purvice STRECTED
	12-	-			Ansell SAMPLE COLLEGIO C~12-13.5	Exercation learnings & 2 /2



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E							nd/or	STATIONINGS				ANGLE F	ROM HORIZ	
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								sand and	grave	to 1 inch	; loose, dry.	,	Cuttin	gs expell- oring usi
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			•		4444.7.	1	慢	6 - 45 ft. SA	MDX	GRAVEI	(GP); Ver	y pale	observ	on visua ations of
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AND DIAN.	SAMP. ADV.	SAMPLE REC. CORE REC.	BLEGUSTAN. RÉCOUREV	LOSS FAM 3	PRESS. CATA	TINE OR	ELEV.	ОЕРТН	GRAPHICS	SAMPLE	(Template: BCHTLLS) DESCRIPTION AND CLAS	SIFICATIO	DN	NOTES WATER WATER CHARAI DRILL	ON: LEVEL RETUR CTER O	s, N, FTC.
								40-								
							4405.8_	45 -			45 - 69 ft. SILT (ML): Dark ye (10 YR 4/2); soft, moist.	llowish brown	D.			
								50-	7 7 7						·	
								66-							i	
								60	1 1 1 1						:	
							4381.7	65			69 - 96 ft. <u>SANDY GRAVEL</u> (GP): Round	ed			
								70		The second second	multicolored gravel to 3 inci to coarse grained sand; loose water flow.	ies; z0-30% f s, wet. Mode	ine rate			ن پۇ
S	SPL	IT SI	POON: ST P = PIT(T = SHE	LBY T	UBE S	I SITE	L		H	OFF SITE	۶ ۹۱ -۵۱	date	: HOLE N	521	· ·





SECRITOR AND CLASSIFICATION NOTES ON: HATER LEVY BEST TO THE STORY SO THE STORY S	G	EO	LOG		ORIL	L LO	G	PROJEC		MI	POCATELLO, ID		3 OF 6	HOLE N
4354.7. 96 - 110 % CLAY (CL): Modarate yallowish brown in 20 story gravel to 1 inch; firm to stiff; medium plastic; moist to wat, moderate water flow (leakage in annulus from overtying unit?).	SAMP DIAM. SAMP. ADV.	SAMPLE REC.	BLOUS TW. RÉCOURY	0.55 1.05 1.05 1.05 1.05 1.05 1.05 1.05	TEST	E .	ELEV.	ОЕРТН	GRAPHICS	3 Idwes		SSIFICATION	NOTES WATER WATER CHARA DRILL	ON: LEVEL RETUR CTER (ING, E
							4354.7.	90-			96 - 119 ft. CLAY (CL): Moderate of sand and angular grains to stiff; medium plastic moderate water flow (leakag from overlying unit?).	erate yellowish fine to coarse ravel to 1 inch;; moist to wet, ge in annulus		



			. <u></u>			
GEOLOGIC DR	RILL LOG	PROJECT <i>EM</i> I	F POCATELLO, ID	1	et No. HOLE NO 52	1
THE DIANGE OF THE CORE OF THE	ATER SSURE SSTS ELEV.	DEPTH GRAPHICS SBUPLE	(Template: BCHTLLS) DESCRIPTION AND CLAS	SSIFICATION	NOTES ON: WATER LEVEL WATER RETUR CHARACTER O DRILLING, E	N. I
	4331.7_	120	119 - 135 ft. SANDY GRAVEI. Rounded cobbles and angula inches, multicolored; 20-30% grained sand; 5-10% silt; loo abundant water flow.	(GP): t fragments to 6 fine to coarse see, wet,		
		130				•
	4315.7	135	135 - 140 ft. CLAY (CL): Mod brown (10 YR 5/4); firm to modetate water flow (leakag from overlying unit?).	lerate yellowish stiff; wet, re in annulus		
	4310.7.		140 - 143 ft. GRAVELLY SIL. Well consolidated fine grain 20% silt and 20% rounded g dense, wet, moderate water 143 - 180 ft. SANDY GRAVE Rounded multicolor gravel fine to coarse grained sand; wet, abundant water flow.	ed sand with ravel to 2 inches; flow.		
		150		*;		
SS = SPLIT SPOON; ST = SHELL D= DENNISON P = PITCHER O =	BY TUBE SITE OTHER		OFF SITE	Last Updat 7-11-94	e: HOLE NO.	



			ROJEC				JOS NO.	SHEET		IOLE NO.
GEOLOGI	C DRILL LO	G		EMF	POCATELLO,		21372	5 OF	6	521
SAMP DIANE SAMPLE REC. CORE REC. BLONE REC. RECECTER	HATER PRESSURE ESTS SELL SSELL	ELEV.	DEPTH	GRAPHICS SAMPLE	(Template: BCHTL DESCRIPTION		SSIFICATI	ON HI	OTES (ATER) ATER) HARAC RILLI	ON: LEVELS, RETURN, TER OF NG, ETC
		4270.7_	160- 165- 175- 180-		180 - 195 ft. CRA's brown (5 YR 3/sand; 30-40% re 6 inches; 10% si water flow.	YELLY SAI (2); fine to rounded multiplicate, we		yish ed rel to		
SS = SPLIT SPOON; S D= DENNISON P = PIT	CHER O = OTHER	SITE			OFF SITE	:	7-11-	Update:		521



SHEET NO. PROJECT JOB NO. HOLE NO. GEOLOGIC DRILL LOG EMF POCATELLO, ID 21372 6 OF 6 521 (Template: BCHTLLS) **GRAPHICS** NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. DEPTH ELEV. DESCRIPTION AND CLASSIFICATION PRESS. 195 - 210 ft. SANDY GRAVEL (CP):
Rounded multicolored gravel to 6 inches;
20% silt and fine grained sand; loose, wet,
abundant water flow. 200 205 4240.7_ 210 - 223 ft. GRAVEL (GP): Angular to subrounded gravel to 3 inches of grayish orange (10 YR 7/4) tuff (hard, with sand-size lithic fragments), black, gray, and red basalt, and firm clay balls; abundant muddy water, clearing to milky water below 220 ft. 215 220 4227.7 223 - 224 ft. Fractured BASALT: Black to gray basalt, altered in places to red; vesicular; with fresh and calcite-lined fractures; hard, becomes extremely hard at 4226.7. 224 ft. Borehole 521 allowed to cave from 224 to 158 ft then completed TOTAL DEPTH: 224 FT. as monitoring well 521 on 6-11-94 using 4° Sch 40 PVC and screened between depths of 147.5 to 157.5 ft. See well construction diagram for completion details. Last Update: HOLE NO. SS = SPLIT SPOON; ST = SHELBY TUBE D= DENNISON P = PITCHER O = OTHER

OFF SITE



SS = SPLIT SPOON: ST = SHELBY TUBE D= DENNISON P = PITCHER O = OTHER

PROJECT JOS NO. SHEET NO. HOLE NO. **GEOLOGIC DRILL LOG** 1 OF 3 21372 EMF POCATELLO, ID 522 ANGLE FROM HORIZBEARING COORDINATES and/or STATIONINGS SITE OFF SITE N 451,927.7 E 552,508.4 Vertical COMPLETED DRILLER DRILL MAKE AND MODEL SIZE OVERBURDEN ROCK (FT.) BEGUN TOTAL DEF 6-13-94 | 6-13-94 | 10" AP-1000 86.5 0.0 86.5 Layne Environmental DEPTH/EL. GROUND WATER \$ 56.0/4394.8 CORE RECOVERY (FT./X) CORE BOXES SAMPLES EL. TOP CASING DEPTH/EL. TOP OF ROCK GROUND EL. 4453.06 4450.8 na/na SAMPLE HAMMER WEIGHT/FALL CASING LEFT IN HOLE: DIA./LENGTH LOGGED BY: C. Obi 140.lb / 30 in 4 in / 85.5 ft (Template: BCHTLLS) GRAPHICS NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC DEPTH DESCRIPTION AND CLASSIFICATION ELEV. 450.5 0 - 4.5 ft. SILTY SAND (SM): Moderate yellowish brown (10 YR 5/4); fine to medium grained sand; 20-40% silt; loose, Borehole drilled wi dual-wall percussion-hamme drill rig. Cuttings expelled from boring using reverse-air circulation. 0.6 28-50/4 0.8 4446.3 4.5 - 42 ft. SANDY CRAYEL (GP): Very pale yellowish orange (10 YR 8/2); subangular to rounded multicolored gravel to 6 inches; 20% fine to coarse grained sand; 10% silt; loose, Soil descriptions based on visual observations of cuttings following Unified Soil Classification Syst (USCS) and the Geological Society America (GSA) R. Color Chart. Sample F522B-4 collected and transferred into gi jar. Last Update: HOLE NO.

OFF SITE

522



GEOLOGIC DRILL L	.OG	E		T NO. HOLE NO. OF 3 522
SAND DIAN. SANDE REC.	ELEV.	ОЕРТН GRAPHICS	(Template: SCHTLLS) DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
S 1.5 1.5 5-10-12	4408.8_	40 45 -	42 - 70 ft. SILT (ML); Pale yellowish brown (10 YR 6/2) to dark yellowish brown (10 YR 4/2); soft, moist to wet.	Sample F522B-46 collected and transferred into glass jar.
3 1.5 1.5 6-7-9		50 -		Sample F522B-56 collected and transferred into glass jar.
	4580.8.	65 -	70 - 86.5 ft. SANDY GRAYEL (GP): Subangular to rounded multicolor gravel to 6 inches; 20% fine to coarse grained sand; loose, wet, abundant muddy water.	
				: HOLE NO. 522

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PROJECT JOB NO. SHEET NO. HOLE NO. **GEOLOGIC DRILL LOG** 21372 EMF POCATELLO, ID 3 OF 3 522 GRAPHICS SAMPLE (Template: BCHTLLS) NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC DEPTH ELEV. DESCRIPTION AND CLASSIFICATION 4364.3. TOTAL DEPTH: 86.5 FT. Borehole 522
completed as
monitoring well 52
on 6-13-94 using 4
Sch 40 PVC and
screened between
depths of 75 and 8
ft. See well
construction diagr
for completion
details. Last Update: HOLE NO. 522 SS = SPLIT SPOON; ST = SHELBY TUBE D= DENNISON P = PITCHER O = OTHER SITE **OFF SITE**







<u>~</u>						-													
	_	EO			<u>.</u> _	D			PROJE		165 8	OC IT	erro	י מז	JOS NO 213				HOLE NO.
SITE	<u>ں</u>	EU	LU	GI	<u>C</u> D	KIL	L LO	COORDINA	ITES			OCAT		, <i>ID</i>	213			OF 3 M HORIZI	523
			OF	FS	ITE							.4 E 5		3.7			Verti		
BECU	N	CO	MPLE		DRIL	LER		<u></u>			L MAKE	AND MO	OEL	SIZE	OVERBURDE	N		(FT.)	TOTAL DI
		4 6						onment				-1000		10"	90.0			0.0	90.
CORE	REC			./%)	CORI		l .	ESEL. TO	р сая 52.9		GROUNI	50.8	DEPTH/	/EL. GROL .0/4395.8	IND WATER	P	EPTH/		OF ROCK
SAMP	LE H	/11.8		GHT /	FALL	0	O LE	FT IN HO					BY:	 ·				na/	па
	,		na	,				4 in / 8							C. (Obi			
щ.	٦.,	j,	2	J	Dr	HATE				7	117	Templat	e: BCH	TLLS)		<u>-</u>			
酒		REC	坚	*		HATE TEST	KE.	ELEV.	E	GRAPHICS	범,	ECCOT	אחדדמי		LASSIFI	יאדי	CON	NOTES	ON:
اخر	<u>,</u>		誤	쯿	S. E.	BRESS.	<u>u</u> .	ELEV.	DEPTH	딅	買 ,	JESUKI	1 TON	I HIND C	'FW33TL T	~ □ 1 1		WATER	LEVEL:
器		SAMP	3	※		i iii	睡		-	GR	7							CHARA	CTER O
8	S	20	-			00	ļ	4450.8	-	11	11	5 ft. S/	NDY S	IILT OM); Grayish	orang			e drilled
							1			$\ \ $		(5 YR 7	72): 20	% fine to	coarse grain	ed sa	nd;	dual-w	JI.
				l						-{{{}}}								drill rig	ion-hamn
						ļ				+	H I							Cutting from be	s expelled
i				ļ					١.	411	HI					_		reverse-	-air
l				Ì				4445.8	√ δ	#	1 <u>5</u>	15 ft. S	ILTY (RAVEL	(GM): Gra	yish		Soil des	criptions
Į		ļ		ļ	ı				Į.	11	7 1	gravel t	5 YR 7 o 3 inci	//2); angu	(GM): Gra lar to round % silt; loose	led , dry	·.	OPSELAS	n visual
									ł		H .			•				Unified	followin Soil
										+								Clauifi (USCS)	cation Sy and the
							1	ł		111								Geolog	and the cal Socie a (GSA)
- {						l	Į .		10	\dashv $\[\]$	i l							Color C	hàrt.
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				.				4435.8	15	; <u> []</u>	┦┝╦	- 44 6	GAND	V CRAV	EL (GP): G	Pavis	<u>. h</u>	4	
			Ì	}		i				١,	1	OTADER	15 YR 7	7/2): ang	iar to roun	ded			
				.		1		}	1		41	sand; 1	D% silt;	loose, dr	7 .	m fra	Ther		
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										10			•						
			-								41								
- 22	SPI	IT S	POON .	· ST	- SH	ELBY 1	URF !	SITE						 -	L	ast L	pdate	HOLE I	10

SS = SPLIT SPOON; ST = SHELBY TUBE
D= DENNISON P = PITCHER O = OTHER

OFF SITE

11-94 HOLE NO. 523



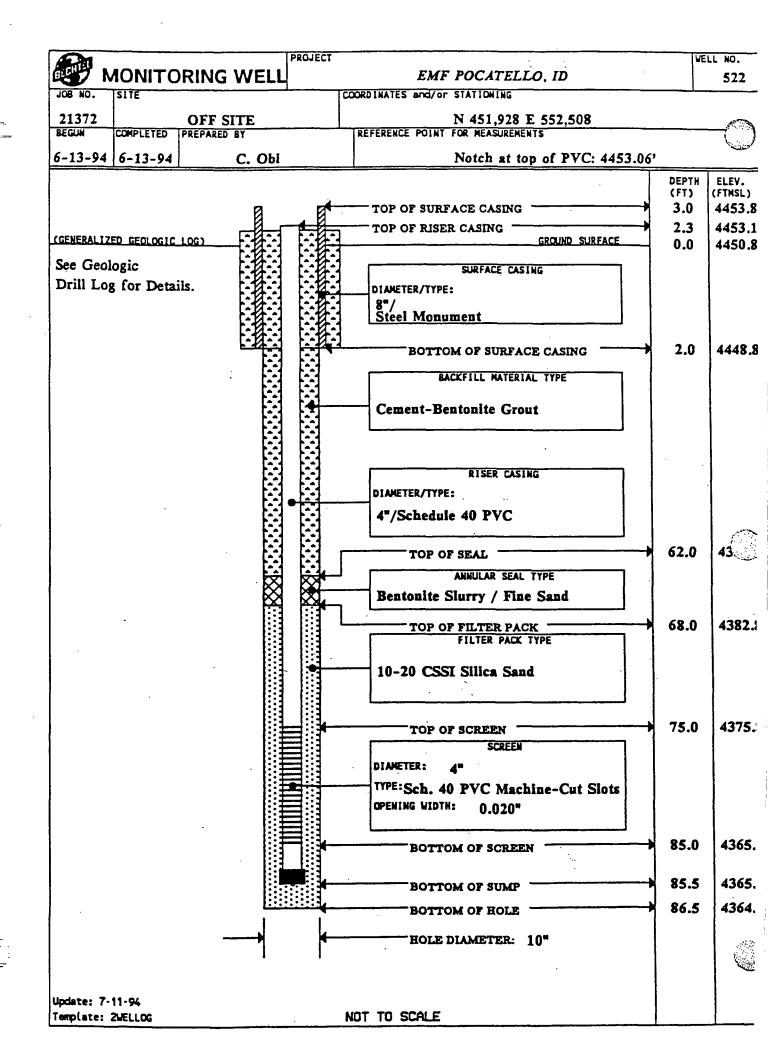
HATER CALLS. DESCRIPTION AND CLASSIFICATION NOTES ON CHARGETER GREUN. CHARGETER G					100					ROJEC			SHEET		
ELEV. B SECRIPTION AND CLASSIFICATION ARTER RECURN, CHARACTER OF C. S.	-	-T' -	GI	<u> </u>	LUG)G		EM	 21372	2 0	OF 3	523
4406.8. 44 - 66 ft. SULT DATA: Moderate yellowish brown (10 YR 5/4); medium plasticity, soft, west. 45 - 65 - 65 ft. SANDY GRAYEL (GP): 50 - 65 - 65 ft. SANDY GRAYEL (GP): 50 - 65 - 65 ft. SANDY GRAYEL (GP): 50 - 65 - 65 ft. SANDY GRAYEL (GP): 50 -	SAMP. TYPE	SAMP. ADV.	LEN CORE	CORE REC.	BLSONS LEN. RÉCSOBEY	SS- F.	• •	ш.	ELEV.	DEPTH	GRAPHICS SAMPLE	SIFICATIO	N L	NOTES ON: NATER LEV NATER RET CHARACTER DRILLING,	ELS, URN, OF ETC.
P- NEWSTOWN L - LITTLER O = GIVER OLY 2715					CON; ST			UER	4382.8_	50~ 60-		GP): icolored grave and; loose, we	d;		

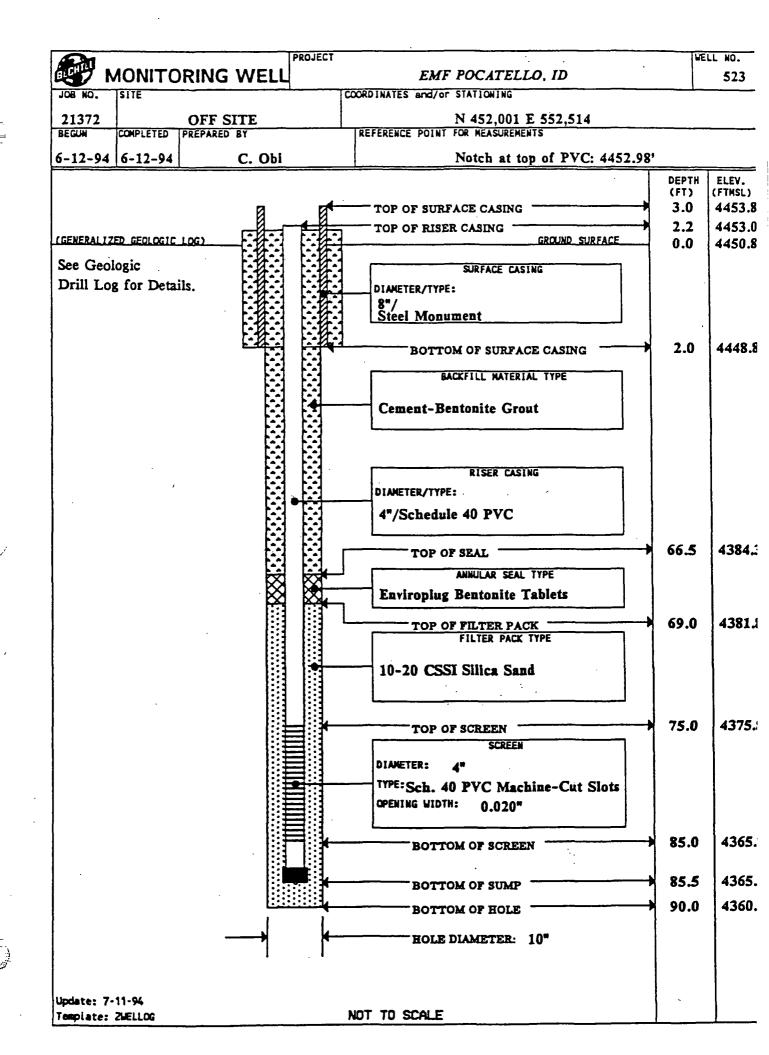


PROJECT JOB NO. SHEET NO. HOLE NO. GEOLOGIC DRILL LOG EMF POCATELLO, ID 21372 3 OF 3 523 (Template: BCHTLLS) GRAPHICS SAMPLE NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC DEPTH ELEV. DESCRIPTION AND CLASSIFICATION 4361.8 89 - 90 ft. CLAY (CL); Moderate yellowish brown (10 YR 5/4); 10% fine to coarse grained sand; medium plasticity, soft to stiff, 4360:8. 90 TOTAL DEPTH: 90 FT. Borehole 523 completed as monitoring well 52 on 6-13-94 using 4 Sch 40 PVC and screened between depths of 75 and 8 ft. See well construction diagr for completion details. Last Update: HOLE NO. 523 SS = SPLIT SPOON; ST = SHELBY TUBE D= DENNISON P = PITCHER O = OTHER OFF SITE



配列 A	OTINON	RING	WELL	PROJECT	EMF POCATELLO, ID	4	ELL NO. 521
JOB NO.	SITE		***************************************		COORDINATES and/or STATIONING		
21372		OFF S	TTE		N 451,926 E 552,516		
BEGUN	COMPLETED				REFERENCE POINT FOR MEASUREMENTS		
i-11-94	6-11-94		C. Obi		Notch at top of PVC: 4452.80°)	
	0 11 74		<u> </u>		1.000 00 17 (0.000)	DEPTH	ELEV.
						(FT)	(FTMSL
			8	. 1	TOP OF SURFACE CASING	3.0	4453
GENERAL 17	ED_GEOLOGIC	1003	त्रीन्त	1.7	TOP OF RISER CASING GROUND SURFACE	2.1	4452
			一批	注注 于	MANUE SYNTALE	0.0	4450
See Geol	_				SURFACE CASING		
Drill Log	for Detai	ils.			DIAMETER/TYPE:		
			[译]	- []	8"/ Steel Monument		
			[4]	[4]			
					BOTTOM OF SURFACE CASING	2.0	4448
					BACKFILL MATERIAL TYPE		1
					,		
					Cement-Bentonite Grout		
							1
					·		}
					RISER CASING		
					DIAMETER/TYPE:		1
					4"/Schedule 40 PVC		•
		,	i A				
				Г	TOP OF SEAL	135.0	431
					ANNULAR SEAL TYPE		
			×	₩ .	Bentonite Slurry / Fine Sand		
					TOP OF FILTER PACK FILTER PACK TYPE	144.0	430
					10-20 CSSI Silica Sand		1
							1
				≢∷⊁ ─	TOP OF SCREEN	147.5	430
			li i	≣::	SCREEN		
			lii ii	≣:::	DIAMETER: 4"		1
					TYPE:Sch. 40 PVC Machine-Cut Slots		}
				∃ ∷!	OPENING WIDTH: 0.020"		1
			::≢	■ ∷1			1
			13		BOTTOM OF SCREEN	157.5	429
						150.0	
•					BOTTOM OF SUMP	158.0	429
			<u> </u>	·····	BOTTOM OF HOLE	224.0	422
		_		4	HOLE DIAMETER: 10"		
			7	1	HOLE DIAMETER: 10.		
	44.6:						}
pdate: 7-	11-94				NOT TO SCALE	1	







FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	SAMP#	LAB#	SAMPLE TIME	TYPE NAME	DTWL	PH (FLD)	PH	SC (UMHOS/CM AT 25 C)
WELL-521	6/29/1994	406521	19940629		Monitoring Wells	59.40		7.62	437
WELL-521	9/8/1994	409521	24024T		Monitoring Wells	56.58		7.58	443
WELL-522	6/29/1994	406522	21308T		Monitoring Wells	59.71		7.31	897
WELL-522	9/8/1994	409522	24025T		Monitoring Wells	56.83		7.3	911
WELL-523	6/29/1994	406523	21256T		FMC-CERCLA Groundwater	59.63		7.37	793
WELL-523	9/8/1994	409523	24026T		FMC-CERCLA Groundwater	56.75		7.32	802
WELL-523	6/2/1995	506523	34012T		FMC-CERCLA Groundwater	57.68		7.34	778
WELL-523	12/1/1995	512523	42826T		FMC-CERCLA Groundwater	55.62		7.25	746
WELL-523	6/2/1996	606523	48319T		FMC-CERCLA Groundwater	55.31	7.49		
WELL-523	11/22/1996	611523	C7413	19:05	FMC-CERCLA Groundwater	55.39	7.53		•
WELL-523	5/17/1997	705523	C9MGR	9:05	FMC-CERCLA Groundwater	56.41	7.54		
WELL-523	10/7/1997	710523	CDAE5	15:30	FMC-CERCLA Groundwater	54.87	7.56		
WELL-523	5/12/1998	805523A	CH5VJ	14:30	FMC-CERCLA Groundwater	54.93	7.4		·
WELL-523	11/3/1998	811523	CN5EA	17:15	FMC-CERCLA Groundwater	54.75	7.4		
WELL-523	5/19/1999	905523	CW3CH	20:25	FMC-CERCLA Groundwater	57.28	7.43		
WELL-523	11/17/1999	911523A	D57CL	9:05	FMC-CERCLA Groundwater	55.00	8.68		•
WELL-523	5/22/2000	5523	DDK81	12:50	FMC-CERCLA Groundwater	56.79	7.44		
WELL-523	11/9/2000	11523	DPPRW	17:05	FMC-CERCLA Groundwater	55.67	7.44		
WELL-523	5/1/2001	105523	ECND9	12:10	FMC-CERCLA Groundwater	56.62	7.44		
WELL-523	11/13/2001	111523	ENX5C	13:45	FMC-CERCLA Groundwater	58.27	7.57		



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	SC (UMHOS/CM AT 25 C) (FLD)	TURBIDITY (NTU) (FLD)	H2O Temp	POTASSIUM (K) TOT		SULFATE (SO4	4)
WELL-521	6/29/1994		1.6	13.6	5.7527	Р	41	W
WELL-521	9/8/1994	·	0.6	13.5	5.5493	Ρ	47	W
WELL-522	6/29/1994		2	14.1	9.3203	Р	61	W
WELL-522	9/8/1994		1.2	14.2	10.0617	Р	65	W
WELL-523	6/29/1994		3.9	13.4	7.913	Р	22	W
WELL-523	9/8/1994		0.5	13.3	7.4903	Р	50	W
WELL-523	6/2/1995		0.1	12.5	7.5627	Р	47.6	W
WELL-523	12/1/1995		0.5	12.4	7.1769	Р	45.6	W
WELL-523	6/2/1996	716	0.3	12.7	8.226	ΕP	38.5	W
WELL-523	11/22/1996	733	0.7	12.2	7.6	J	65	j
WELL-523	5/17/1997	702	0.1	12.7	7.4		100	U
WELL-523	10/7/1997	667	0.5	12.2	7.7		45	
WELL-523	5/12/1998	, 720	. 0	12.7	7.8		44.5	
WELL-523	11/3/1998	669	0.2	12.4	7.6		45	J,
WELL-523	5/19/1999	667	0.38	12.6	8		44	J
WELL-523	11/17/1999	764	0.4	12.6	8.07		42.5	
WELL-523	5/22/2000	762	0.4	12.6	8.01		43.1	,J
WELL-523	11/9/2000	774	0.3	12.2	7.91		45.7	
WELL-523	5/1/2001	731	0.5	12.2	8.73		42.9	
WELL-523	11/13/2001	739	0.4	12.7	7.82		42.1	



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	CHLORIDE (CL)	F	LUORIDE (F	=)	TOTAL AMMONIA (NH3+NH4 AS N)		NITRATE (NO3-N)	
WELL-521	6/29/1994			0.828	W			0.79	С
WELL-521	9/8/1994			0.8	W			0.9	С
WELL-522	6/29/1994			0.6	W			4.09	C.
WELL-522	9/8/1994			0.7	W	,		3.65	С
WELL-523	6/29/1994			0.566	W			3.08	С
WELL-523	9/8/1994	٠		0.6	W			2.95	С
WELL-523	6/2/1995	86	T			0.5	· U,UT	2.17	С
WELL-523	12/1/1995	87	T			0.5	U,UT	2.14	С
WELL-523	6/2/1996	77.5	Т			0.4	U,UT	3.19	С
WELL-523	11/22/1996	56				0.2	U	2.6	
WELL-523	5/17/1997	72	J			0.2	U	2.2	
WELL-523	10/7/1997	75				0.2	U	2.7	J
WELL-523	5/12/1998	86.4	,J			0.2	U	0.5	JR
WELL-523	11/3/1998	89.5				0.2	U	2.7	J
WELL-523.	5/19/1999	88.8	j			0.2	U	2.8	J
WELL-523	11/17/1999	. 84				0.2	U	2.7	
WELL-523	5/22/2000	87.6		٠		0.2	U	2.9	
WELL-523	11/9/2000	90.7				0.2	U	3	
WELL-523	5/1/2001	85.6				0.2	U	2.8	
WELL-523	11/13/2001	80.2		0.37		0.2	U	2.8	



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	ORTHOPHOSPHATE (PO4-P)		PHOSPHORUS (P) TOT	ALUMIN	UM (AL) TOT	ANTI	MONY (SB) TO	ЭТ
WELL-521	6/29/1994	0.02	U,UC						
WELL-521	9/8/1994	0.02	U,UC	•				. •	
WELL-522	6/29/1994	0.025	С						
WELL-522	9/8/1994	0.031	С		-				
WELL-523	6/29/1994	0.02	U,UC			<u> </u>		<u> </u>	
WELL-523	9/8/1994	0.029	С					•	
WELL-523	6/2/1995	0.02	U,UC						
WELL-523	12/1/1995	0.02	U,UC		•				
WELL-523	6/2/1996	0.02	U,UC						
WELL-523	11/22/1996	0.1	U,J		•				
WELL-523	5/17/1997	0.1	U						
WELL-523	10/7/1997	0.1	U,J	·					
WELL-523	5/12/1998	0.1	U						
WELL-523	11/3/1998	0.1	U						
WELL-523	5/19/1999	0.1	U,J '		•				
WELL-523	11/17/1999	0.1	U						
WELL-523	5/22/2000	0.39							
WELL-523	11/9/2000	0.08	B.UJ						
WELL-523	5/1/2001	0.1	U						
WELL-523	11/13/2001	0.027	BJ,JU	0.9,	U	0.0462 1	B,UJ	0.01	U



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	ARSENIC (AS) TOT		BARIUM (BA) TOT		BORON (B) TOT	C	ADMIUM (CD) TOT	CHROMIUM (CR) TO	Т
WELL-521	6/29/1994	0.0041	BAS	0.0668	BP	·		· · · · · · · · · · · · · · · · · · ·		
WELL-521	9/8/1994	0.0044	BAS	0.0662	BP					
WELL-522	6/29/1994	0.0042	BNAS	0.156	BP					
WELL-522	9/8/1994	0.0078	BAS	0.1637	BP				•	
WELL-523	6/29/1994	0.0054	BAS	0.1752	BP					
WELL-523	9/8/1994	0.0098	BAS	0.1589	BP					
WELL-523	6/2/1995	0.0038	U,UAS			•			•	
WELL-523	12/1/1995	0.0028	U,UAS							
WELL-523	6/2/1996	0.0046	BAS						•	
WELL-523	11/22/1996	0.0084	U					•	•	
WELL-523	5/17/1997	0.0061	U	`						
WELL-523	10/7/1997	0.006								
WELL-523	5/12/1998	0.0088	,J			•				
WELL-523	11/3/1998	0.004	B,J							
WELL-523	5/19/1999	0.0053						ı		
WELL-523	11/17/1999	0.0055							•	
WELL-523	5/22/2000	0.0054								
WELL-523	11/9/2000	0.0034	B,J							
WELL-523	5/1/2001	0.0055		•	•					
WELL-523	11/13/2001	0.0053		0.178	B,J	0.0995	B,UJ	0.001	U 0.005	U



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	COBALT (CO) TOT	COPPER (CU) TOT	r Li	EAD (PB) TOT	·LITHIUM (LI) 1	гот	MANGANESE (MI	V) TOT	
WELL-521	6/29/1994		· · · · · · · · · · · · · · · · · · ·					0.24		Р
WELL-521	9/8/1994					•		0.0008		U,UP
WELL-522	6/29/1994							0.0008		U,UP
WELL-522	9/8/1994							0.0008		U,UP
WELL-523	6/29/1994							0.0056		BP
WELL-523	9/8/1994			•				0.0008		U,UP
WELL-523	6/2/1995									
WELL-523	12/1/1995								•	
WELL-523	6/2/1996									
WELL-523	11/22/1996	•								
WELL-523	5/17/1997									
WELL-523	10/7/1997	•								
WELL-523	5/12/1998									
WELL-523	11/3/1998		5.		•					
WELL-523	5/19/1999									
WELL-523	11/17/1999									
WELL-523	5/22/2000							•		
WELL-523	11/9/2000									
WELL-523	5/1/2001	•			,					
WELL-523	11/13/2001	0.05	U 0.0012	B,UJ	0.003	U 0.0406	B,J	0.00048		B,UJ





FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	MERCURY (HG) TOT	MOLYBDENUM (MO) TOT N	IICKEL (NI) TOT	SELENIUM (SE) TO	OT ·	SILVER (AG) TOT
WELL-521	6/29/1994			,		0.0035	U,UAS	
WELL-521	9/8/1994					0.0035	U,UAS	
WELL-522	6/29/1994					0.0035	U,UAS	
WELL-522	9/8/1994			·		0.0035	U,UAS	
WELL-523	6/29/1994					0.0035	U,UAS	
WELL-523	9/8/1994	,				0.0035	U,UAS	
WELL-523	6/2/1995					0.0021	U,UAS	
WELL-523	12/1/1995		•			0.002	U,UN*A	
WELL-523	6/2/1996					0.0031	U,UAS	•
WELL-523	11/22/1996					0.0031	BU	
WELL-523	5/17/1997					0.005	· U	
WELL-523	10/7/1997					0.005	Ü	
WELL-523	5/12/1998					0.005	U,,J	
WELL-523	11/3/1998	•				0.005	U	
WELL-523	5/19/1999					0.005	U	
WELL-523	11/17/1999					0.005	U	
WELL-523	5/22/2000	•				0.005	Ū	
WELL-523	11/9/2000		`			0.005	U	
WELL-523	5/1/2001					0.005	U	
WELL-523	11/13/2001	0.0002	J 0.0016	B,UJ_	0.04	U 0.005	U_	0.005





FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	THALLIUM (TL) TOT	VANADIUM (V) TO	T Z	INC (ZN) TO	T GR	OSS ALPHA (pCi	(I) GROSS	BETA (pCi/l)
WELL-521	6/29/1994	···		•					
WELL-521	9/8/1994						_		
WELL-522	6/29/1994								
WELL-522	9/8/1994		<u>. </u>						
WELL-523	6/29/1994								
WELL-523	9/8/1994								
WELL-523	6/2/1995								
WELL-523	12/1/1995								
WELL-523	6/2/1996		•						
WELL-523	11/22/1996	•					•		
WELL-523	5/17/1997								
WELL-523	10/7/1997							,	
WELL-523	5/12/1998								
WELL-523	11/3/1998	•							
WELL-523	5/19/1999								•
WELL-523	11/17/1999								
WELL-523	5/22/2000								
WELL-523	11/9/2000								
WELL-523	5/1/2001								•
WELL-523	11/13/2001 l	J 0.006 B	,UJ 0.0041	B,J	0.00051	B,UJ	4.2		7



FMC - All Data For Wells 521, 522 and 523

SITE CODE	SAMP DATE	ORTHOPHOSPHATE (PO4-P)	•	PHOSPHORUS (P) TOT	ALUN	MINUM (AL) TOT	AN ⁻	MONY (SB) T	ОТ
WELL-521	6/29/1994	0.02	U,UC			<u></u>			
WELL-521	9/8/1994	0.02	U,UC	`					
WELL-522	6/29/1994	0.025	С						
WELL-522	9/8/1994	0.031	С		_	·			
WELL-523	6/29/1994	0.02	Ū,UC	,					
WELL-523	9/8/1994	0.029	С					,	
WELL-523	6/2/1995	0.02	U,UC						
WELL-523	12/1/1995	0.02	U,UC		•				
WELL-523	6/2/1996	0.02	U,UC	·					
WELL-523	11/22/1996	0.1	U,J			•			
WELL-523	5/17/1997	0.1	Ü	•					
WELL-523	10/7/1997	0.1	U,J	•					
WELL-523	5/12/1998	0.1	Ú						
WELL-523	11/3/1998	0.1	U						
WELL-523	5/19/1999	0.1 ·	U,J ʻ	•					
WELL-523	11/17/1999	0.1	Ú						
WELL-523	5/22/2000	0.39	•						
WELL-523	11/9/2000	0.08	B.UJ						
WELL-523	5/1/2001	0.1	บ						•
WELL-523	11/13/2001	0.027	BJ,JU	0.9	U	0.0462	B,UJ	0.01	υ

APPENDIX 12

Class V Injection Well Closure Laboratory Results and Chain of Custody

DRY WELL AND SEPTIC TANK SAMPLE ANALYTICAL RESULTS

				, Cyanio (n							
Sample Identity	As	Ва	Cd	Cr	Pb	Hg	Se	Ag	Total	Amenable	Comments
DW-L/DW-U COMP	0.03	<0.3	2.44	0.01	0.02	<0.0002	<0.015	<0.006	14.4	NA	8/2/00
ST-S	0.041	<0.3	0.002	0.012	<0.006	<0.0002	0.021	<0.006	57.1	1.6	8/2/00



104 West 31st Street Boise, Idaho 83714

Phone.(208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

15:30

DATE RECEIVED:

09/29/00

DATE REPORTED:

10/06/00

PROJECT: WILLIAMSON / PN# 33-003.05

SOURCE: DW-U

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

14804

PERCENT MOISTURE: 22.1%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

BARIUM

CADMIUM

CHROMIUM

LEAD

MERCURY SELENIUM

SILVER

6.0 71.0 897.0 904.0

222.0

1.63 < 6.0

23.4

Howell, Laboratory Manager





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC

DATE COLLECTED:

08/02/00

ATTENTION: KELLY PACKARD

TIME COLLECTED:

15:20

PO BOX 4111

DATE RECEIVED:

09/29/00

POCATELLO, IDAHO 83205

DATE REPORTED:

10/06/00

PROJECT: WILLIAMSON / PN# 33-003.05

SOURCE: DW-L

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

14803

PERCENT MOISTURE: 19.7%

ANALYSIS

RESULTS (mg/kg)

Dry Weight

ARSENIC

1.5

BARIUM

12.0

CADMIUM

68.6

CHROMIUM

53.3

LEAD

63.3

MERCURY SELENIUM 0.026

SILVER

< 0.6

7.8

well, Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION

ATTENTION: KELLY PACKARD

PO BOX 4111

POCATELLO, IDAHO 83205

DATE COLLECTED:

08/02/00

TIME COLLECTED:

COMP

DATE RECEIVED:

08/03/00

DATE REPORTED:

08/18/00

PROJECT: WILLIAMSON / PN# 33-003.06

SOURCE: DW-L/DW-U COMP

MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

11510

PERCENT MOISTURE: 14.5%

ANALYSIS

RESULTS

(mg/kg)

CYANIDE

14.4

owell, Laboratory Manager

AUG 2 2 2000

SUMMIT ENVIRONMENTAL, INC.





104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

FMC CORPORATION P.O. BOX 4111 POCATELLO, IDAHO

83205

DATE COLLECTED - - -08/02/2000

TIME COLLECTED - - - COMP

- 08/03/2000 DATE RECEIVED -

DATE REPORTED - - - 08/14/2000

ATTENTION: KELLY PACKARD

SOURCE -: DW-L/DW-U COMP/TCLP/SCIL /P:WILLIAMSON/PN# 33-003.06

SUBMITTED : BRAD HARR

LAB SAMPLE NUMBER - 11509

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.030	08/10/2000	MM
BARIUM	<0.30	08/10/2000	MM
CADMIUM	2.44	08/10/2000	MM
CHROMIUM	0.010	08/10/2000	MM
¬¬AD	0.020	08/10/2000	MM
RCURY	<0.0002	08/10/2000	SQ
SELENIUM	<0.015	08/10/2000	MM
SILVER	<0.006	08/10/2000	MM

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	NAME Summit Environmental the		Ø-	1				Z	Λ		3		ㅁ	<i>D O O</i>	cary Land	Alchen 104 We	n Lo	abore	at o	iles,	6	A	9
	ADDRESS 5257 Fair View # 260 CITY Boise \$3706 PHONE! 208-377-2900 FAX! 377-2929	М	ATR	ıx					LA Page					ES E METH		olse, le hone	dat (20	3) 33	37 14 36-1	1 172		X	
	SAMPLER (S) PROJECT OR SITE PROJECT OR SITE P.N. / P.O. NUMBER 33-003.05			9	1 1	BTEX (602 / 8020) (+N +M)	2 / 8021)	(624/8260)	PHENOLS (604 / 8040 / 8270)	PESTICIDES (608 / 8081 / 8270)	ES (625/8270)		AD GAS	D GAS D. EDB (8011)	EL OILS PAH (8270)	R OILS H (8270) 8010)	Sec. 1	a cyan			CONTAINERS	100	
	Chain of Custody Form LAB DATE TIME SAMPLE IDENTIFICATION	WATER	SOIL	OTHER TPH - 8015 MOD	TPH - 418.1	BTEX (602 / 80	VOC's (601-602 / 8021	GC-MS VOC's (624 / 8260)	PHENOLS (60	PESTICIDES (608 /	SEMI-VOLATILES	TCIP-(DESIMARE	RBCA - NO LEAD GAS	BTEX+N+M (8020) RBCA - LEADED GAS BTEX+N+M (8020), EDB (8011) EDC (8010)	J5 8	RBCA - MOTOI BTEX (8020), PAP CL SOLVENTS (6	Total C	Ammak			NUMBEROF	1358.3	
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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTN: JERRY CUTLER

P O BOX 668

SODA SPRINGS, ID 83276

DATE COLLECTED: 08/01/01 TIME COLLECTED: 13:45 DATE RECEIVED: 08/02/01 DATE REPORTED: 08/03/01

SAMPLED BY: MIKE LARANGO

Project: 33.003.06 Source: COMP-DWB Matrix: SOIL

METHOD - BTEX 8260

LAB SAMPLE NUMBER - 29514

ORGANIC CONTAMINANT	DATE <u>ANALYZED</u> 08/02/01	ANALYST J. DORMAN	ANALYTICAL RESULTS (μg/kg)
BTEX			
Benzene			<25.0
Toluene			<25.0
Ethlybenzene	-		<25.0
Total Xylenes	·		<25.0

Suzanne Howell, Laboratory Manager

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTN: JERRY CUTLER

P O BOX 668

SODA SPRINGS, ID 83276

DATE COLLECTED:

08/01/01

TIME COLLECTED:

14:00

DATE RECEIVED:

08/02/01

DATE REPORTED: SAMPLED BY: MIKE LARANGO

08/03/01

Project: 33.003.06 Source: COMP-DWS

Matrix: SOIL

METHOD - BTEX 8260

LAB SAMPLE NUMBER - 29515

ORGANIC CONTAMINANT	DATE ANALYZED 08/02/01	ANALYST J. DORMAN	ANALYTICAL RESULTS (<u>µg/kg)</u>
BTEX			
Benzene			<25.0
Toluene		`	<25.0
Ethlybenzene			<25.0
Total Xylenes			<25.0

Suzanne Howel aboratory Manager

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTN: JERRY CUTLER

P O BOX 668

SODA SPRINGS, ID 83276

DATE COLLECTED:

08/01/01

TIME COLLECTED: DATE RECEIVED:

13:45

DATE REPORTED:

08/02/01

SAMPLED BY: MIKE LARAGNO

08/03/01

Source: COMP-DWB

Project: 33.003.06

Matrix:

SOIL

LAB SAMPLE NUMBER -

LABORATORY REPORT FOR PURGABLE HALOCARBONS BY 8260

•	METHOD DETECTION	ANALYTICAL
COMPOUND	LEVEL $(\mu g/kg)$	RESULTS $(\mu g/kg)$
estimate of the soul de		· ND
Vinyl Chloride	10.0	ND ND
1,1-Dichloroethylene	25.0	
1,1,1-Trichlorethane	25.0	ND
Carbon Tetrachloride	25.0	ND
1,2-Dichloroethane	25.0	ND
Trichloroethylene	25.0	ND
p-Dichlorobenzene	25.0	ND
Chlorobenzene	25.0	ND
o-Dichlorobenzene	25.0	ND
cis-1,2-Dichloroethene	25.0	, ND
trans-1,2-Dichloroethene	25.0	, ND
1,2-Dichloropropane	25.0	. ND
Methylene Chloride	25.0	ND
Tetrachloroethylene	25.0	ND
1,2,4-Trichlorobenzene	25.0	ND
1,1,2-Trichloroethane	25.0	ND

Date Analyzed: 08/02/01

ND = None Detected

Analyst: J. DORMAN

REPORT CONT. NEXT PAGE





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

REPORT CONTINUED

Lab No. 29514

Page 2

LEVEL $(\mu g/kg)$	RESULTS $(\mu g/kg)$
10.0	ND
25.0	ND
50.0	ND
10.0	ND
50.0	ND
	10.0 25.0 50.0 10.0

	METHOD DETECTION	ANALYTICAL
COMPOUND	LEVEL $(\mu g/kg)$	RESULTS (μg/kg)
		-
Bromobenzene	25.0	ND
Bromochloromethane	25.0	ND
Bromomethane	100.0	ND
Chloroethane	50.0	ND
Chloromethane	25.0	ND
2-Chlorotoluene	25.0	ND
4-Chlorotoluene	25.0	ND
1,2-Dibromo-3-Chloropropane	250.0	ND
1,2-Dibromoethane	75.0	ND
Dibromomethane	200.0	ND
1,3-Dichlorobenzene	25.0	ND
Dichlorodifluoromethane	25.0	ND
1,1-Dichloroethane	25.0	ND
1,3-Dichloropropane	25.0	ND
2,2-Dichloropropane	25.0	ND
1,1-Dichloropropene	25.0	ND
cis-1,3-Dichloropropene	25.0	, ND
trans-1,3-Dichloropropene	25.0	ND
Hexachlorobutadiene	25.0	ND
1,1,1,2-Tetrachloroethane	25.0	ND
1,1,2,2-Tetrachloroethane	25.0	ND
1,2,3-Trichlorobenzene	25.0	ND
Trichlorofluoromethane	25.0	ND
1,2,3-Trichloropropane	25.0	ND

ND = None Detected

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTN: JERRY CUTLER

P O BOX 668

SODA SPRINGS, ID 83276

DATE COLLECTED:

08/01/01

TIME COLLECTED:

14:00

DATE RECEIVED: DATE REPORTED: 08/02/01

08/03/01

SAMPLED BY: MIKE LARAGNO

Project: 33.003.06 Source: COMP-DWS Matrix: SOIL

LAB SAMPLE NUMBER -

LABORATORY REPORT FOR PURGABLE HALOCARBONS BY 8260

	METHOD DETECTION	ANALYTICAL
COMPOUND	$ extit{LEVEL}$ $(\mu extit{g}/ extit{kg})$	RESULTS $(\mu g/kg)$
		·
Vinyl Chloride	10.0	ND .
1,1-Dichloroethylene	25.0	ND
1,1,1-Trichlorethane	25.0	ND
Carbon Tetrachloride	25.0	ND
1,2-Dichloroethane	25.0	ND
Trichloroethylene	25.0	ND
p-Dichlorobenzene	25.0	ND
Chlorobenzene	25.0	ND ·
o-Dichlorobenzene	25.0	ND
cis-1,2-Dichloroethene	25.0	N D
trans-1,2-Dichloroethene	25.0	ND
1,2-Dichloropropane	25.0	ND
Methylene Chloride	25.0	ND
Tetrachloroethylene	<i>25.0</i>	ND
1,2,4-Trichlorobenzene	25.0	ND
1,1,2-Trichloroethane	25.0	ΝD

Date Analyzed: 08/02/01

Analyst: J. DORMAN

ND = None Detected

Suzanne Howel

REPORT CONT. NEXT PAGE





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Water, Waste Water and Soil Analysis

REPORT CONTINUED

Lab No. 29515

Page 2

COMPOUND	METHOD DETECTION LEVEL (μg/kg)	ANALYTICAL RESULTS (µg/kg)
THM'S (TRIHALOMETHANES)		
Bromodichloromethane	10.0	ND
Chlorodibromomethane	25.0	ND
Bromoform	50.0	ND
Chloroform	10.0	<i>ND</i>
TOTAL THM'S	50.0	ND

Description		METHOD DETECTION	ANALYTICAL
Bromochloromethane 25.0 ND	COMPOUND	LEVEL $(\mu g/kg)$	RESULTS (μg/kg)
Bromochloromethane 25.0 ND	Promohenzene	25 0	ND
Bromomethane 100.0 ND Chloroethane 50.0 ND Chlorotoluene 25.0 ND 2-Chlorotoluene 25.0 ND 4-Chlorotoluene 25.0 ND 1,2-Dibromo-3-Chloropropane 25.0 ND 1,2-Dibromoethane 75.0 ND 1,2-Dibromoethane 200.0 ND 1,3-Dichlorobenzene 25.0 ND Dichlorodifluoromethane 25.0 ND 1,1-Dichloroethane 25.0 ND 1,3-Dichloropropane 25.0 ND 2,2-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND 1,1-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND Hexachlorobutadiene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 N			
Chloroethane 50.0 ND Chloromethane 25.0 ND 2-Chlorotoluene 25.0 ND 4-Chlorotoluene 25.0 ND 1,2-Dibromo-3-Chloropropane 250.0 ND 1,2-Dibromoethane 75.0 ND Dibromomethane 200.0 ND 1,3-Dichlorobenzene 25.0 ND 1,1-Dichloroethane 25.0 ND 1,3-Dichloropropane 25.0 ND 1,3-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND 1,1-Dichloropropene 25.0 ND 1,1-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0		- · · ·	
Chloromethane 25.0 ND 2-Chlorotoluene 25.0 ND 4-Chlorotoluene 25.0 ND 1,2-Dibromo-3-Chloropropane 250.0 ND 1,2-Dibromoethane 75.0 ND Dibromomethane 200.0 ND 1,3-Dichlorobenzene 25.0 ND Dichlorodifluoromethane 25.0 ND 1,1-Dichloroethane 25.0 ND 1,3-Dichloropropane 25.0 ND 2,2-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND cis-1,3-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND Hexachlorobutadiene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND			
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4-Chlorotoluene 25.0 ND 1,2-Dibromo-3-Chloropropane 250.0 ND 1,2-Dibromoethane 75.0 ND Dibromomethane 200.0 ND 1,3-Dichlorobenzene 25.0 ND Dichlorodifluoromethane 25.0 ND 1,1-Dichloroethane 25.0 ND 1,3-Dichloropropane 25.0 ND 2,2-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND 1,1-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND Hexachlorobutadiene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND			ND
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1,1-Dichloroethane 25.0 ND 1,3-Dichloropropane 25.0 ND 2,2-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND cis-1,3-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND Hexachlorobutadiene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	1,3-Dichlorobenzene	25.0	ND
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2,2-Dichloropropane 25.0 ND 1,1-Dichloropropene 25.0 ND cis-1,3-Dichloropropene 25.0 ND trans-1,3-Dichloropropene 25.0 ND Hexachlorobutadiene 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,1,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	1,1-Dichloroethane	25.0	ND
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Hexachlorobutadiene 25.0 ND 1,1,1,2-Tetrachloroethane 25.0 ND 1,1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	cis-1,3-Dichloropropene	25.0	ND .
1,1,1,2-Tetrachloroethane 25.0 ND 1,1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	trans-1,3-Dichloropropene	25.0	ND
1,1,2,2-Tetrachloroethane 25.0 ND 1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	Hexachlorobutadiene	25.0	ND
1,2,3-Trichlorobenzene 25.0 ND Trichlorofluoromethane 25.0 ND	1,1,1,2-Tetrachloroethane	25.0	ND
Trichlorofluoromethane 25.0 ND	1,1,2,2-Tetrachloroethane	25.0	= :=
	1,2,3-Trichlorobenzene	25.0	
1,2,3-Trichloropropane 25.0 ND	Trichlorofluoromethane	25.0	
	1,2,3-Trichloropropane	25.0	ND

ND = None Detected

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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/01/01

TIME COLLECTED:

13:45

DATE RECEIVED: DATE REPORTED:

08/02/01 08/03/01

PROJECT: 33.003.06 SOURCE: COMP-DWB MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

29516

PERCENT MOISTURE: 29.5%

ANALYSIS	DATE ANALYZED	ANALYST	RESULTS (mg/kg) Dry Weight
ARSENIC	8/3/2001	MM	3.8
BARIUM	8/3/2001	MM	160.0
CADMIUM	8/3/2001	MM	209.0
CHROMIUM	8/3/2001	MM	32.9
LEAD	8/3/2001	MM	1,720.0
MERCURY	8/3/2001	SQ	0.02
SELENIUM	8/3/2001	MM	<0.70
SILVER	8/3/2001	MM	149.0

anne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

DATE COLLECTED:

08/01/01

TIME COLLECTED:

14:00 PM

DATE RECEIVED:

08/02/01

DATE REPORTED:

08/03/01

PROJECT: 33.003.06 SOURCE: COMP-DWS MATRIX: SOIL

LABORATORY SAMPLE NUMBER:

29517

PERCENT MOISTURE: 19.5%

ANALYSIS	DATE ANALYZED	ANALYST	RESULTS (mg/kg) Dry Weight
ARSENIC	8/3/2001	MM	3.5
BARIUM	8/3/2001	MM	107.0
CADMIUM	8/3/2001	MM	180.0
CHROMIUM	8/3/2001	MM	20.0
LEAD	8/3/2001	MM	7.2
MERCURY	8/3/2001	SQ	0.02
SELENIUM	8/3/2001	MM	<0.6
SILVER	8/3/2001	MM	1.0

zanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

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Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: 33.003.06 SOURCE: COMP-DWS MATRIX: SOIL

DATE COLLECTED:

08/01/01

TIME COLLECTED:

14:00

DATE RECEIVED: DATE REPORTED: 08/02/01 08/07/01

LABORATORY SAMPLE NUMBER: 29517

PERCENT MOISTURE:

19.5%

ANALYSIS	DATE ANALYZED	ANALYST	RESULTS (mg/kg) Dry Weight
ARSENIC	8/3/2001	MM	3.5
BARIUM	8/3/2001	MM	107.0
CADMIUM	8/3/2001	MM	180.0
CHROMIUM	8/3/2001	MM	20.0
CYANIDE, TOTAL	8/6/2001	SQ	0.5
CYANIDE, AMENABLE TO CL2	8/6/2001	SQ	0.2
LEAD	8/3/2001	MM	7.2
MERCURY	8/3/2001	SQ	0.02
SELENIUM	8/3/2001	MM	< 0.6
SILVER	8/3/2001	MM	1.0

Laboratory Manager





104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: 33.003.06 SOURCE: COMP-DWB MATRIX: SOIL DATE COLLECTED:

08/01/01

TIME COLLECTED:

13:45

DATE RECEIVED: DATE REPORTED: 08/02/01 08/07/01

LABORATORY SAMPLE NUMBER: 29516

PERCENT MOISTURE:

29.5%

ANALYSIS	DATE ANALYZED	ANALYST	RESULTS (mg/kg) Dry Weight
ARSENIC	8/3/2001	MM	3.8
BARIUM	8/3/2001	MM	160.0
CADMIUM	8/3/2001	MM	209.0
CHROMIUM	8/3/2001	MM 1	32.9
CYANIDE, TOTAL	8/6/2001	SQ	109.0
CYANIDE, AMENABLE TO CL2	8/6/2001	SQ	77.5
LEAD	8/3/2001	MM	1,720.0
MERÇURY	8/3/2001	SQ	0.02
SELENIUM	8/3/2001	MM	<0.70
SILVER	8/3/2001	MM	149.0

Suzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

DATE COLLECTED - - -08/01/2001

TIME COLLECTED - - -13:45

DATE RECEIVED - - - 08/02/2001 DATE REPORTED - - 08/10/2001

SUBMITTED : MIKE LARANGO

ATTENTION: JERRY CUTLER SUBMIT SOURCE -: COMP-DWB TCLP / SOIL / PN: 33.003.06

, ---, ------

LAB SAMPLE NUMBER - 29518

83276

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	0.028	08/02/2001	MM
BARIUM	<0.30	08/02/2001	$M\!M$
CADMIUM →	<0.0015	08/02/2001	$M\!M$
CHROMIUM	< 0.006	08/02/2001	$M\!M$
_,LEAD	<0.006	08/02/2001	$M\!M$
TRCURY	< 0.0002	08/10/2001	SQ
`∠ <i>ELENIU</i> M	<0.015	08/02/2001	MM
SILVER	0.010	08/02/2001	MM

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Suzanne Howell Laboratory Manager



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LABORATORY REPORT

ASTARIS

P.O. BOX 668

SODA SPRINGS, IDAHO

83276

DATE COLLECTED - - -08/01/2001

TIME COLLECTED - - -14:00

DATE RECEIVED - - - 08/02/2001

DATE REPORTED - - - 08/10/2001

ATTENTION: JERRY CUTLER

SUBMITTED : MIKE LARANGO

SOURCE -: COMP-DWS TCLP / SOIL / PN: 33.003.06

LAB SAMPLE NUMBER - 29519

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYSŤ
ARSENIC	0.015	08/02/2001	MM
BARIUM	0.3 <i>6</i>	08/02/2001	MM
CADMIUM	1.90	08/02/2001	MM
CHROMIUM	<0.006	08/02/2001	MM
LEAD	<0.006	08/02/2001	MM
RCURY	< 0.0002	08/10/2001	SQ
LENIUM	0.039	08/02/2001	MM
SILVER	<0.006	08/02/2001	MM

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Suzanne Howell

Laboratory Manager

ATTENDED HARR. ADDRESS, 95 S. COCHARD CITY DOLL STATE ZIPCE	ODE	·	<u> </u>	(p) - 1		X	4	/BC	C DR/			7	1 B	04 We olse, Ic hone (st 31s daho	t Stre 837	∥ — eet 14	, Inc		,
PHONE # 308-377-2900 FAX 308-377-290 SAMPLER (SYN) Ke LARINGO PROJECT OBJECT OBJECT OF PILE BRAD HARR Chain of Custody Form	29 R .8/2/01	ATRI	015 MOD	BTEX (602 / 8020) (+N +M)	CL SOLVENTS (601 / 8010)	AS VOC's (624 / 8260)	20 0	PESTICIDES (608 / 8081 / 8270)	PCB's (608 / 8081)	ANALYSIS)	· NO LEAD GAS	A - LEADED GAS - N-M (8020), EDB (8011) - H	A - FUEL OILS (8020), PAH (8270)	4 - MOTOR OILS (8020), PAH (8270) OLVENTS (8010)	ald Mores 7765	01/05 114 826	+ Motorage a saule		NUMBER OF CONTAINERS	
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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

ASTARIS

ATTENTION: JERRY CUTLER

P.O. BOX 668

SODA SPRINGS, IDAHO 83276

PROJECT: WILLIAMSON

PN#33.003.5 SOURCE: DW128 MATRIX: SLUDGE DATE COLLECTED:

08/08/01

TIME COLLECTED:

16:00

DATE RECEIVED:

08/10/01

DATE REPORTED:

08/30/01

LABORATORY SAMPLE NUMBER: 30115

PERCENT MOISTURE:

34.7%

ANALYSIS

DATE ANALYZED

ANALYST

RESULTS (mg/kg)

Dry Weight

CADMIUM

CYANIDE, TOTAL

8/27/2001

8/23/2001

MM SQ

3.37

354.0

CYANIDE, AMENABLE TO CL2

8/23/2001

SQ

175.0

Suzanne Howell, Laboratory Manager

A	ATTENDA HOW ADDRESS CITY STATE ZIP CODE													ALCHEN LABORATORIES TESTS (CIRCLE METI									Alchem Labora 3, Inc. 104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172							
· [_	H975-77	-1	an	FAX#277-117	7	M	ATF	RIX								T	ES1	S (0	IR	CLE	METH	OD)			····	٠.				,
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LAE NUMB		Una ATE	TIME	Custody Form SAMPLE IDENTIFICATION	ATION	WATER	SOIL	ОТНЕЯ	TPH - 418.1	3TEX (602 /	SL SOLVEN	VOC's (601-602 / 8021)	SC-MS VOC	PAH'S (8270 / 8310)	ESTICIDES	PCB's (608 / 8081)	SEMI-VOLAT	CLP-(DESIG	8 HCHA METALS	HBCA - NO LEAD GAS BTEX+N+M (8020)	3BCA - LEAC 3TEX+N+M (80 3DC (8010)	RBCA - FUEL OILS	BCA - MOT	BTEX (8020), PAH (8270) CL. SOLVENTS (8010)	الله ولا	thread	Total			NUMBER
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APPENDIX 13

Septic Tank Assessment

Mr. Jim Sieverson FMC Corp P.O. Box 4111 Pocatello, ID 83205

RE: Williamsen (Tesco) Property, Pocatello, Idaho

Septic Tank Assessment Summit Project No. 33.003.06

Dear Mr. Sieverson:

This letter report provides a review of the septic system design, septic tank sampling results, and septic tank wastewater disposal options for the Williamsen (Tesco) property. Project tasks were conducted from February 2000 to August 2002.

Background

FMC purchased the Williamsen (Tesco) property in September of 1999. The site had been abandoned for several years. FMC has not conducted any business operations at the Williamsen property.

The Williamsen site was initially developed as a truck repair and maintenance facility in the late 1970's by Tesco American, Inc. Around 1985 or 1986, Tesco American leased the site to Mr. Allan Elias, and he operated businesses at the site under two names - Industrial Refining, Inc. and A.E.I. Corporation. The site history and previous owner / operator practices are reported in several site environmental investigation reports by government agencies and private firms which inspected the operations of Industrial Refining, Inc., A.E.I. Corporation, and the abandoned facility prior to the sale to FMC. FMC does not have any other information pertaining to a complete operating history of the site.

FMC contracted with Summit Environmental, Inc. (Summit) and Envirocon to assist FMC with environmental investigation and restoration of Williamsen property. Work at the property was initiated in the Spring of 2000 and field work continued through November 2001.

Environmental projects completed at the Williamsen site included the decommissioning of two underground petroleum storage tanks; the characterization and management of over 50 abandoned material containers; the removal and disposal of 2 to 4 inches of pigeon dung, feathers and debris in the building shop area; the characterization and remediation of cadmium-contaminated soil; the closure of a Class V shallow injection well; and the sampling and analysis of the facility septic tank contents. This letter report provides a review of the septic system design, septic tank sampling results, and septic tank wastewater disposal options for the Williamsen (Tesco) property

Septic Tank Assessment

Septic System Description - Original construction drawings of the property show a septic system located on the west side of the site. The drawings were produced by Adamson Engineering and consist of three sheets, M-1 through M-3. Sheet M-1 is the Site Plan, Sheet M-2 is the Main Level Mechanical and Plumbing, and Sheet M-3 is the Upper Level Mechanical and Plumbing. Copies of the appropriate sections of these drawings are included in Attachment A - Figures.

The mechanical and plumbing drawings show the locations of bathrooms, sinks and associated piping. These locations appear consistent with the observed physical layout of the building. However, during Summit's walk through inspection in the Winter of 2000, some modifications to the main level plumbing system were observed. The bathroom area and adjacent room contained what appeared to be a small mineral assay laboratory, including a stainless steel workbench and sink. The work area sink drain was plumbed into the main level wastewater plumbing. Some abandoned equipment and containers of materials were on the workbench. The remainder of the building wastewater piping from bathroom sinks and toilets appeared to drain to the septic system as originally designed.

According to the Site Plan drawing, the septic tank has a capacity of approximately 1500 gallons with the drain field located directly north of the tank. The septic tank and drain field are located approximately 140 feet west of the building.

Septic Tank Sampling and Analysis and Addition of Chlorine - A representative sample of the septic tank waste was collected on August 2, 2000 (sample ID: ST-S). The objective of the sampling and analysis was to determine if the tank contents were RCRA hazardous waste due to the RCRA toxicity characteristic for metals. The sample was also analyzed for total and amenable cyanide because of the observed presence of a suspected mineral assay laboratory. Visual examination showed that the septic tank contents appeared to be consistent with black wastewater sewage. The sample was approximately 50% black-water and 50% black-sludge. A representative sample was placed in laboratory supplied containers, labeled, and stored in a cooler with blue ice. The sample was submitted to Analytical Laboratories of Boise, Idaho for RCRA TCLP metals, total cyanide, and amenable cyanide analysis. EPA Standard Methods 335.2 and 335.1 were used for the total and amenable cyanide analysis, respectively.

The laboratory results indicated that the septic tank contents were not RCRA hazardous waste due to metals toxicity. The results showed 57.1 mg/kg total cyanide and 1.6 mg/kg amenable cyanide. The August 2, 2000 laboratory reports and chain of custody record are provided in Attachment B.

Several disposal options were reviewed for the septic tank wastewater. The typical disposal method would be to pump out the septic tank and dispose of the contents to a public wastewater treatment plant. The nearest public wastewater treatment plant is operated by the City of Pocatello and it was determined that the total cyanide concentration needed to be less than 0.2 mg/L if the wastewater was to be pumped and transported to the Pocatello wastewater treatment plant. FMC contracted with

Envirocon to disassociate the cyanide and to sanitize for any microbials present. Envirocon added concentrated chlorine material (swimming pool disinfectant) to the septic tank wastewater during the Winter of 2000.

Pre-disposal Sampling and Analysis - Summit re-sampled the septic tank contents for total cyanide and amenable cyanide on May 23, 2001 (sample ID: ST-Will). A bacteria sample was collected on August 8, 2001 (sample ID: William - SEP). The cyanide sample was submitted to AlChem Laboratories of Boise, Idaho, and the bacteria sample was submitted to IAS - Enviro Chem of Pocatello, Idaho. The 2001 results show the total cyanide concentration to be 0.11 mg/L. The amenable cyanide was below the laboratory detection limit at <0.005 mg/L and total coliform bacteria was absent at <2 counts. Attachment C - 2001 Laboratory Reports and Chain of Custody Records, contains the laboratory reports and the chain of custody records for the 2001 septic tank sampling.

Septic Tank Wastewater Disposal - The Idaho rules for cleaning septic tanks are set forth in IDAPA 16 Title 01 Chapter 15. Section 3.03. of the rule - Disposal Method, describes four methods that can be utilized for excrement disposal. Attachment D - Rules Governing the Cleaning of Septic Tanks, contains a copy of the relevant Idaho regulation. Summit's research indicated that the Idaho DEQ would be the appropriate agency to contact regarding burying or drying the wastewater on-site. Disposal of the septic tank contents at the City of Pocatello wastewater treatment plant would require prior approval by the City of Pocatello. During Summit's August 2001 final sampling event, there was approximately 400 to 600 gallons of wastewater/sludge in the septic tank. The septic tank contents were not removed or disposed of by Summit.

If you have any questions or need further information, please call me at 208.377.2900.

Sincerely.

Bradley Harr MS, CHMM Sr. Environmental Scientist

Ewlerson for

Attachments

A Figures

B August 2000 Laboratory Reports and Chain of Custody Record

C 2001 Laboratory Reports and Chain of Custody Records

D Rules Governing the Cleaning of Septic Tanks

APPENDIX 14

Previous Contractor Reports

- Phase 1 Environmental Assessment Report EnviroSearch - November 7, 1995
- Environmental Site Assessment Phase 2 Reeve & Associates - Aug. - Sept. 1996

From Rob H.
11/3/97

PHASE ONE ENVIRONMENTAL ASSESSMENT REPORT

Former A.E.I. Corporation Facility 1297 East County Road West Pocatello, Idaho OGT 3 0 1997 RECEIVED

November 7, 1995

Submitted to:

Mr. Paul Price Paul A. Price & Associates 1400 Foothill Blvd., Suite 110 Salt Lake City, Utah 84108

Prepared by:

EnviroSearch International Corporate Office 844 South 200 East Salt Lake City, Utah 84111 (801) 532-1717 Fax (801) 532-1777

PHASE ONE ENVIRONMENTAL ASSESSMENT REPORT

Former A.E.I. Corporation Facility 1297 East County Road West Pocatello, Idaho

November 7, 1995

TABLE OF CONTENTS

1.0	INTRO	DUCTION	1
	1.1 \$	Scope of Work	1
2.0	SITE D	ESCRIPTION/GEOGRAPHIC CONDITIONS	1
		Current Property Use	
		Site History Sources	
		Past Property Use	
	2.4	Current Adjoining Property Uses	3
		Adjoining Property/Vicinity History	
3.0	RECOR	RDS REVIEW	4
4.0	SITE R	ECONNAISSANCE	4
	4.1 H	Hazardous Substances and Wastes	4
	4.2	Storage Tanks	5
	4.3 F	Polychlorinated Biphenyls (PCBs)	6
	4.4 (CERCLIS (NPL) / RCRA Investigation	6
		Asbestos	
5.0	CONCL	USIONS	8
6.0	•	TIONS OF ASSESSMENT	•
7.0		TURES OF ENVIRONMENTAL PROFESSIONAL	
APP	ENDIX 1	Sitè Location Map	
APP	ENDIX 2	Scope of Work	
APP	ENDIX 3	Site Photographs	
APP	ENDIX 4	Aerial Photographs	·

1.0 INTRODUCTION

EnviroSearch International was engaged by Mr. Paul Price of Paul A. Price & Associates to conduct a Phase One Environmental Assessment of the former A.E.I. Corporation facility located at 1297 East County Road in West Pocatello, Idaho, (hereinafter referred to as "the Property"). This project was undertaken to more fully describe historic land use and environmental conditions, both on the Property and within its immediate vicinity, utilizing reasonably ascertainable historical reference sources and other public records. An area map indicating the location of the Property is presented in Appendix 1.

1.1 Scope of Work

The Scope of Work performed for this assessment was designed to evaluate the likelihood of environmental contamination associated with, or in close proximity to, the Property. The extent and coverage of this investigation is modeled after the scope and limitations of the American Society for Testing & Materials (ASTM) Standard Practice E 1527-94. A copy of this Scope of Work has been attached to this report as Appendix 2. These activities were undertaken to inform the client as to the known environmental history and current environmental status of the investigated Property as far as can be reasonably determined from existing documentation.

2.0 SITE DESCRIPTION/GEOGRAPHIC CONDITIONS

The Property is located in the southwest comer of Section 12, Township 6 South, Range 33 East, Boise Base and Meridian. According to the United States Geological Survey (USGS), Property elevation is approximately 4,450 feet above mean sea level. The closest surface water to the Property is the Taghee Canal, located adjoining the west Property boundary. Vegetation on the Property consists of grasses and weeds in the undeveloped northern portion and along the fence lines. One two-story building is currently located in the center of the southern portion of the Property. A concrete apron surrounds the building on all four sides. The concrete extends to the Property boundaries on the south,



west and east and approximately 50 feet to the north of the building. The remainder of the Property, north of the building, is undeveloped.

2.1 Current Property Uses

There are currently no activities on the Property. Site photographs depicting current Property conditions are located in Appendix 3.

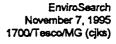
2.2 Site History Sources

The site history was established utilizing several sources. A 7.5 minute USGS topographic map of the Michaud Quadrangle, Idaho, published in 1971 and photo inspected in 1974, was consulted for any information concerning the Property. Aerial photographs of the Property exposed in 1975, 1981 and 1995, obtained from Idaho Repro-Graphics Inc. of Boise, Idaho, also were reviewed for visual changes in Property use. Copies of the aerial photographs may be found in Appendix 4. Archived copies of Polk City Directories for Pocatello and Suburban areas also were searched for any information relative to historic Property use. In addition, an Appraisal Valuation Report on the Property, prepared in April, 1995, was also reviewed for information relative to this investigation.

2.3 Past Property Uses

The Property was not listed in the Polk directories. However, information contained in the appraisal report indicates that the Property was developed in 1978. _Aerial photographs of the Property and vicinity verify this information. The 1975 photograph shows the Property as undeveloped agricultural land, while the 1985 photograph depicts the commercial development of the Property.

According to information contained in the appraisal report, and other information supplied by Mr. Paul Price, the Property has been utilized by two separate operations. The Property was commercially developed in 1978 by Tesco American, Inc. (Tesco) for use as a truck maintenance and repair facility. In approximately 1988 the Property was sold to A.E.I. Corporation (AEI) and was



utilized for a metals extraction/fertilizer manufacturing facility. A discussion of the potential impact to the Property from these operations will follow in the appropriate sections.

2.4 Current Adjoining Property Uses

The Property is located in an area of agricultural/industrial use. Adjoining properties to the west, north and east of the Property are undeveloped agricultural land. Adjoining properties to the south are owned and operated by FMC Corporation (FMC) as part of a phosphate ore processing plant. More will be discussed regarding this plant in a following section.

2.5 Adjoining Property History

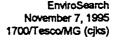
The historical uses of adjoining properties were established utilizing information obtained from Polk City Directories and historic aerial photographs.

1975 - The Property and surrounding parcels to the west, north and east appear to be utilized for agricultural purposes. The FMC Corporation operations are evident to the south. The Taghee Canal can be seen adjoining the Property on the west. One residence is evident east of the Property.

1981 - Development of the Property is evident. Several semi-tractor trailers and other pieces of equipment are stored in the yard surrounding the building. The adjoining parcels to the west, north and east of the Property remain undeveloped. No other changes are evident.

1995 - No new developments are evident on the Property or on adjoining parcels. The majority of the equipment has been removed and the Property appears unused.

Polk Directories did not contain a listing for County Road prior to 1985. However, the FMC and Simplot facilities are listed on "Highway 30 west of the city" as early as 1960. No other listings for Highway 30 were recorded. In addition, no listings for FMC or Simplot were recorded in the 1955 Polk Directory.



3.0 RECORDS REVIEW

The United States Environmental Protection Agency's (EPA) CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) list was reviewed to identify and locate any listed potential Superfund sites adjacent to, or within a one-half mile radius of, the Property, including potential National Priority List (NPL) sites within one mile. The EPA RCRA (Resource Conservation and Recovery Act) Master Facility list of businesses or entities known to generate or handle hazardous wastes was reviewed regarding the Property and adjacent parcel use, as well as Treatment, Storage and Disposal Facilities (TSDFs) within a one-mile radius. The Idaho Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) lists were reviewed for documentation of USTs or LUSTs registered on, or in the vicinity of, the Property.

4.0 SITE RECONNAISSANCE

The site reconnaissance of the Property was conducted on October 17, 1995 by Mr. Michael Grange of EnviroSearch. The site reconnaissance focused on: evidence of contamination by hazardous substances (stains, odors, etc.); the presence of above-ground storage tanks (ASTs) or visual indication of underground storage tanks (USTs); transformers and other electrical equipment potentially containing Polychlorinated Biphenyls (PCBs); possible Asbestos-Containing Materials (ACMs); and an evaluation of current land use. During and after the site reconnaissance, adjacent properties were also evaluated for their potential environmental impact on the Property.

4.1 Hazardous Substances and Wastes

At the time of the site reconnaissance several unidentified materials were noted on the Property. Drums, cans and plastic bottles of different materials including; formaldehyde compounds, cyanide compounds, possible petroleum products and other unidentified substances were located throughout the building interior. Special precautions should be taken when handling such materials and it may

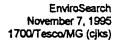
be in the client's best interests to have unidentified substances analyzed and characterized to determine appropriate handling and disposal methods.

A.E.I. utilized the Property as a metals extraction/fertilizer manufacturing facility. The raw material for this operation was reportedly a by-product of the FMC phosphate operation located to the south of the Property. During the site visit a layer of this material was noted spread about the undeveloped portion of the Property north of the building. The material had been mixed with native soils and an accurate measurement of the depth of the material was not possible. However, it appeared that several inches of material had been deposited in some areas. At this time it is not known if this material actually came from the FMC facility and the contents are unknown. Therefore, it may be in the client's best interest to have this material analyzed and characterized to determine appropriate handling and disposal procedures.

Tesco operations on the Property may have potentially affected environmental conditions as well. Truck repair and maintenance facilities are known to use lubricants, solvents and petroleum products during routine activities. Leaks or spills of such substances on the Property may have negatively impacted the soils. What appeared to be floor sumps were noted in the shop portion of the building. The sumps were sealed with heavy metal plates and an investigation of their interiors was not possible. The Property is not served by municipal sewer or water systems and these sumps may be connected to the septic system or a storage tank on the Property. Groundwater at this location is reportedly 54 feet below grade and as such it is not likely that small petroleum spills or leaks at the surface would impact groundwater. Although, if the sumps are connected to a storage system, leaks from this system may pose a threat of contamination to soil and groundwater on the Property. However, only sampling and analysis can determine the presence and extent of any potential contamination to soils and/or groundwater.

4.2 Storage Tanks

Neither the Property nor its adjoining properties are registered as UST sites with the Idaho Department of Environmental Quality (DEQ). However, at the time of



the site visit a pump station, evidently for dispensing natural gas, was noted at the northwest corner of the building. The pipeline ran around the corner of the building and then into the ground and it was not possible to follow it from that point. No fill caps or vent pipes associated with a possible storage tank for the natural gas were visible on the Property.

Additionally, no LUST sites were registered with the Idaho DEQ within one-half mile of the Property.

4.3 Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, an attempt was made to identify electrical or mechanical equipment that may contain or be contaminated with Polychlorinated Biphenyls (PCBs). At the time of the assessment one pad-mounted electrical transformer was identified on the Property. Information regarding the potential PCB content of the transformer oils has been requested from Idaho Power but was not available at the time of this report. As soon as this information becomes available it will be provided to the client.

4.4 CERCLIS (NPL) / RCRA Investigation

The Comprehensive Environmental Response and Liability Information System (CERCLIS) list is a registry of those sites (known or suspected) that have a potential for environmentally hazardous contamination sufficient to qualify for further investigation under Superfund. The National Priority List (NPL) is a registry of those CERCLIS sites that rank highest for regulatory action and/or cleanup. The Emergency Response Notification System (ERNS) list is a federal registry of emergency responses to hazardous materials incidents (such as spills or other releases to the environment). ASTM search parameters for ERNS sites include only the Property and directly adjoining properties while the parameter for CERCLIS sites is one-half mile from the Property boundaries. State hazardous waste and NPL sites within one mile of the Property boundaries are required to be reported.

Adjoining properties to the north, east and west do not appear on the CERCLIS or ERNS lists. However, the Property is registered as a CERCLIS site and also lies within the boundaries of the Eastern Michaud Flats Contamination (EMF) NPL site.

According to information contained in Idaho DEQ files the EMF site encompasses approximately a four mile radius around the waste water ponds located on the northeast corner of the J.R. Simplot (Simplot) phosphate ore processing facility which is located approximately one mile east of the Property. The Simplot and FMC facilities are also listed as CERCLIS sites but were combined with the EMF site for investigational purposes. A Preliminary Site Characterization Summary (PSCS) has been completed on the EMF site and documents the results of a Remedial Investigation conducted by Simplot and FMC. Potential release sources, onsite and offsite soils, groundwater, surface water and sediments have all been investigated and characterized. Contaminants of concern include heavy metals such as cadmium, total chromium, vanadium, lead, and zinc, as well as fluoride, phosphate and sulfate.

Groundwater contamination appears to be concentrated in an area north and east of the waste water ponds and is reportedly contained in the upper aquifer. Simplot and FMC have implemented control measures, including closure of the unlined waste water ponds, which have reduced the releases of contaminants to the groundwater. Further studies of the hydraulic influence of potential release sources and the influence of onsite groundwater remediation on groundwater flow patterns are in progress. The results of these studies will be released at a later date.

Soil contamination is most evident immediately north and east of the phosphate facilities, reportedly a result of windblown ore deposition. The observed contaminant levels are reported to follow a pattern consistent with the prevailing winds in the area. Contaminant levels are also reported to decrease rapidly as the distance from the facilities increases. In addition, only near surface soils have reportedly been contaminated. No subsurface contamination was found except where mechanical agitation appears to have mixed the deposited ore with the native soils, such as in the area of the Interstate 86 corridor. The PSCS also

reports that solid byproducts from the Simplot and FMC facilities, (i.e. the slag reportedly utilized by AEI as a raw material) do not leach contaminants of concern above levels which would classify this material as a hazardous waste.

It should be noted that although hundreds of samples were collected and analyzed, no soil or groundwater samples were taken on the Property in connection with the EMF remedial investigation. Given this information, and the fact that the source of AEI's raw material is questionable, it may be in the client's best interests to have onsite soils sampled and analyzed to determine proper handling and disposal procedures.

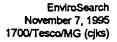
The RCRA list is a State-maintained registry of those entities known to generate, store, transport, or dispose of environmentally hazardous wastes. The Property and its adjoining properties are not included on the RCRA Master List as hazardous waste generators or treatment, storage or disposal (TSD) facilities.

4.5 Asbestos

The site reconnaissance included a visual inspection of accessible areas for the identification of possible asbestos-containing materials (ACMs). Acoustic ceiling tiles were the only potential ACM noted on the Property at the time of the site visit. Several of these tiles appeared cracked or water damaged. Only sampling and analysis can provide definitive results regard asbestos content of suspect materials. If activities are planned which would expose potential ACMs to cutting, abrading, or grinding it may be in the client's best interests to conduct a comprehensive asbestos survey and have any suspect materials analyzed by a certified laboratory.

5.0 CONCLUSIONS

During the course of this assessment several factors were considered to determine the likelihood of environmental contamination of the Property. The potential impact from adjoining parcels as well as activities conducted on the Property itself were investigated to provide insight into environmental conditions associated with this investigation.



The Property has been utilized for industrial/manufacturing purposes since its commercial development in 1978. Truck repair and maintenance facilities are known to use lubricants, solvents and petroleum products during routine activities. It is possible that some of these materials were spilled or leaked and contaminated onsite soils. Floor sumps located in the shop may be a source of potential contamination to soils and groundwater. The Property has also been utilized as a metals extraction facility. Chemicals such as formaldehyde and cyanide were evidently utilized during the extraction process (some of these compounds were noted onsite during the site visit). It is possible that these activities have also impacted soils and/or groundwater on the property. Spills or leaks of process chemicals or waste waters in addition to process emissions all have the potential to contaminate the Property. Given the nature of these activities it may be in the client's best interests to have soil and groundwater samples analyzed to determine the extent of contamination, if any, from these prior operations.

There is no record or indication that ASTs or USTs are, or have ever been, utilized on the Property. In addition, no UST or LUST sites are reported within one-half mile of the Property.

The Property is not registered as a NPL, or ERNS site, nor is it a RCRA hazardous waste generator or TSD facility. In addition, there are no RCRAlisted hazardous waste generators or TSD facilities within the search distances specified by ASTM. However, the Property is registered as a CERCLIS site and is located within the boundaries of the Eastern Michaud Flats Contamination NPL site. Contaminants of concern at the EMF site include heavy metals such as lead, cadmium, chromium and arsenic, as well as phosphate, sulfate and fluoride. The main areas of contamination appear to be north and east of the Property, however, soil and groundwater samples were not taken from the Property itself. In addition, a previous tenant of the Property, A.E.I. Corporation, reportedly used byproducts from the FMC Corporation phosphate ore processing facility as a raw material for its metal extraction process. Although the byproducts reportedly are not classified as a hazardous waste by EP or TCLP analytical methods the question of proper handling and disposal remains. Therefore, it may be in the client's best interests to have onsite soils sampled and analyzed, by qualified individuals, to determine appropriate handling and disposal procedures.

The electrical transformer noted on the Property at the time of the site visit appeared to be in good condition. No visual evidence of leakage were noted. Information regarding potential PCB content of the transformer oils was not available at the time of the report, however, this information has been requested and will be provided to the client as soon as it becomes available. No other potential source of PCB contamination was noted on the Property at the time of the site visit.

Potential ACMs noted on the Property during the site visit appeared to be in poor condition. If renovation or demolition, or other procedures are anticipated which would expose suspect materials to cutting, abrading, etc., are anticipated it may be the client's best interests to have such materials sampled and analyzed by a certified laboratory to determine actual asbestos content, if any.

EnviroSearch International has conducted a Phase One Environmental Site Assessment (ESA) in accordance with the scope and limitations of ASTM Standard Practice E 1527-94 of the former A.E.I. Corporation facility located at 1297 East County Road in West Pocatello, Idaho. This assessment revealed no evidence of environmental conditions in connection with the Property except those mentioned above.

6.0 LIMITATIONS OF ASSESSMENT

The scope of this assessment is limited to the matters expressly covered herein. The report is prepared for the sole benefit of Paul A. Price & Associates and may not be relied upon by any other person or entity without express authorization of said corporation. This study was restricted to observations made during EnviroSearch's inspection of the Property and research into its history. With the exception of the revelation of recorded violations discovered upon routine review of environmental regulatory records, the Scope of Work did not address compliance with any Federal, State or local laws, regulations, ordinances, or codes

All findings reported as a result of a site walk shall be strictly limited to the condition of the Property as of the recorded date of the site walk. This report does not address conditions which may have arisen on the Property after that date.

In preparing this report, EnviroSearch has relied upon certain verbal information and representations provided by state and local government employees. EnviroSearch did not attempt to independently verify the accuracy or completeness of that information, but did not detect any inconsistency or omission of a nature that might call into question the validity of any such information. To the extent that the conclusions in this report are based in whole or in part on such information, they are contingent on its validity.

EnviroSearch represents that, within the parameters established by the agreed upon Scope of Work, the work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, either express or implied, is made.

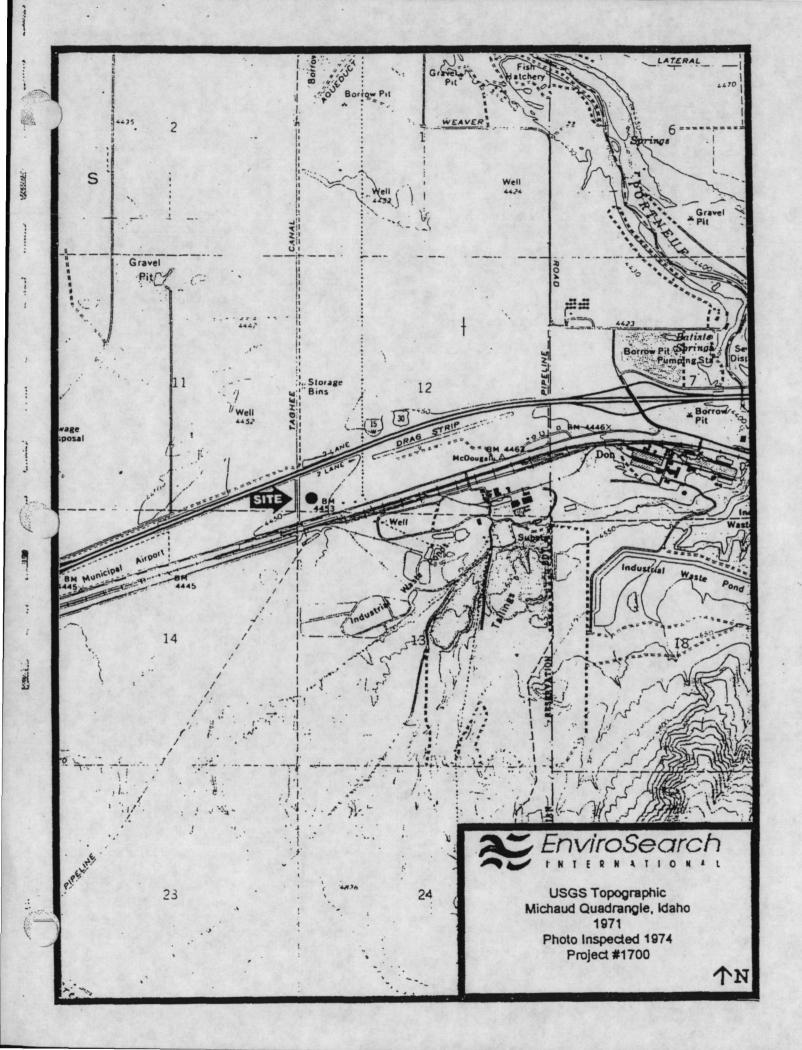
7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Prepared by:

Michael Grange

Approved by:

Kent Christie



SCOPE OF WORK

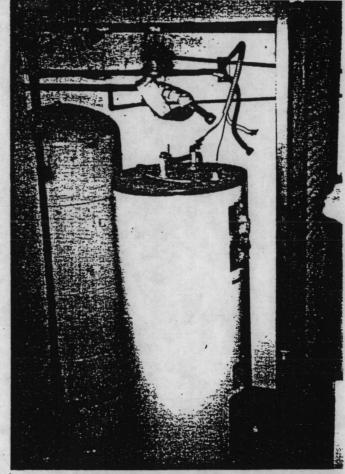


EnviroSearch proposes to perform the following work to identify Recognized Environmental Conditions associated with each Property, as defined by ASTM, including hazardous substances regulated under CERCLA and petroleum products.

- Conduct a thorough site reconnaissance to obtain information indicating the likelihood of Recognized Environmental Conditions in connection with the Property such as the presence of storage tanks, drums, PCBs, odors, surface stains, stressed vegetation, waste systems, and current/past uses to the extent they can be visually and physically observed;
- Conduct a preliminary visual evaluation for the presence of Asbestos-Containing Materials (ACMs);
- Review reasonably ascertainable Standard Environmental Records Sources such as CERCLIS, RCRA, ERNS, UST and LUST for inclusion of the Property or adjoining properties (observing ASTM's recommended minimum search distances);
- Review reasonably ascertainable Standard Historical Sources such as city directories, tax files, fire insurance maps, zoning/land use records and other historical sources to identify past uses and occupancies of the Property back to 1940 (minimum) or initial development;
- Review selected aerial photographs that include the Property and obtain re-prints or enlargements as deemed appropriate;
- Review chain-of-title documentation, if provided;
- Generally describe adjoining area historic use and occupancy to the extent identified during the review of the Property:
- Identify and describe general Property setting characteristics such as adjoining roads, area use, topography, geology and hydrology;
- Document findings and Property conditions with photographs;
- Interview appropriate individuals such as the Key Site Manager or current Property occupant(s), as well as fire department and health agency representatives, to obtain information indicating Recognized Environmental Conditions in connection with the Property;
- Prepare a written report that includes documentation of our procedures, site maps, appropriate supporting appendices, a summary of the identified Recognized Environmental Conditions, as well as the preparer's opinion of the impact of the recognized environmental conditions in connection with the Property.



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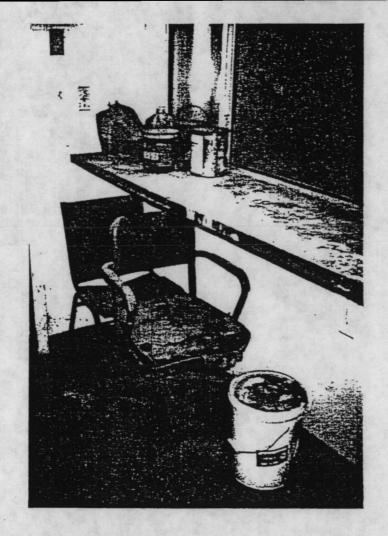


Interior -Mechanical Room



Interior -55 Gallon Drum: Label Unreadable

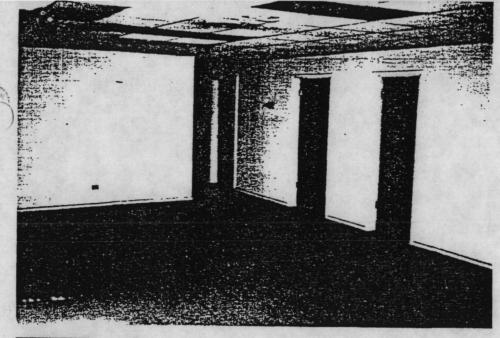
> EnviroSearch November 7, 1995 1700/Tesco/MG (cjks)



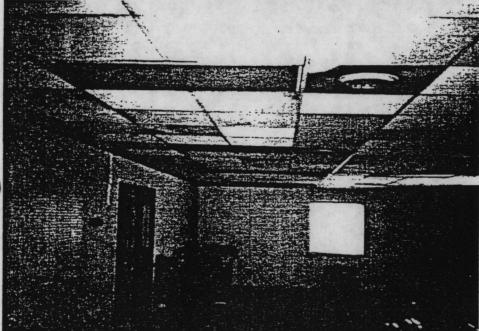
Interior -Cyanide Compound and Other Unknown Chemicals



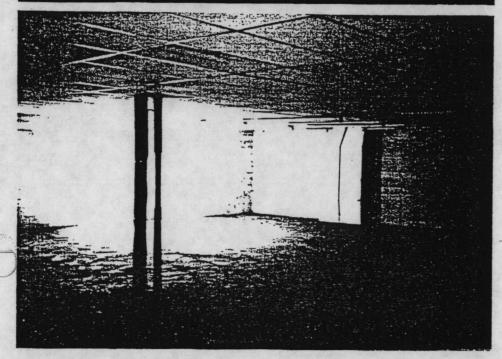
Interior -Unknown Chemicals



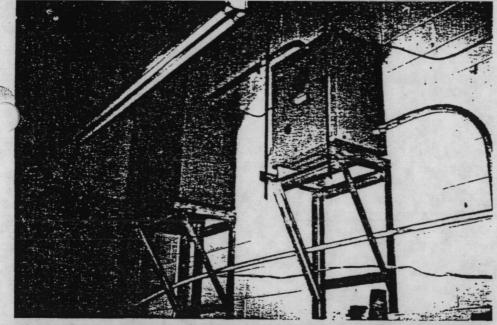
Interior



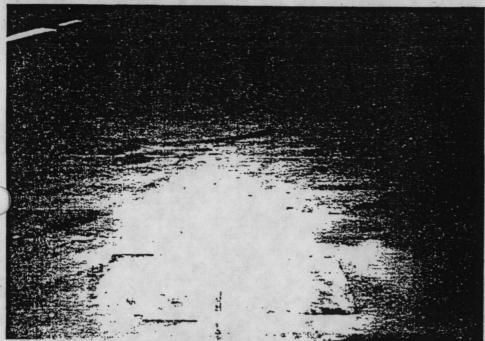
Interior



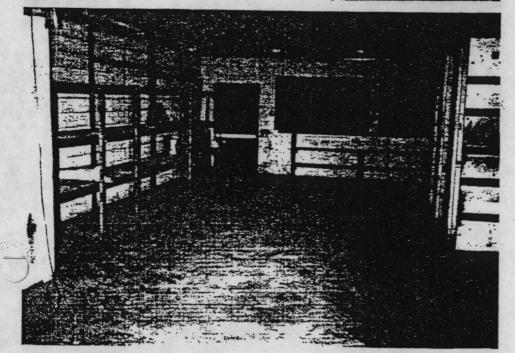
Interior



Interior -Electrical Center



Interior -Floor Sumps



Interior



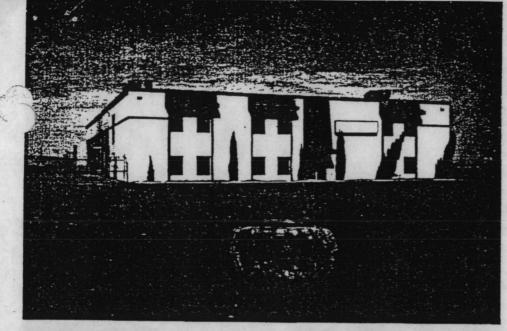
Back Lot -View to the North



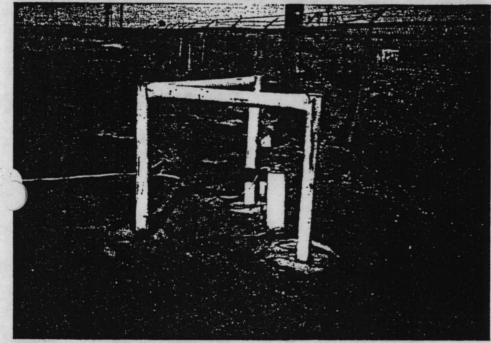
Back Lot -View to the Northwest



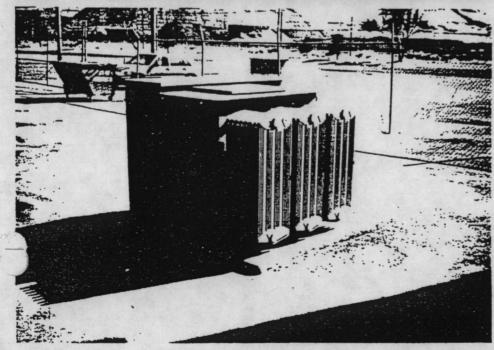
Back Lot -View to the West



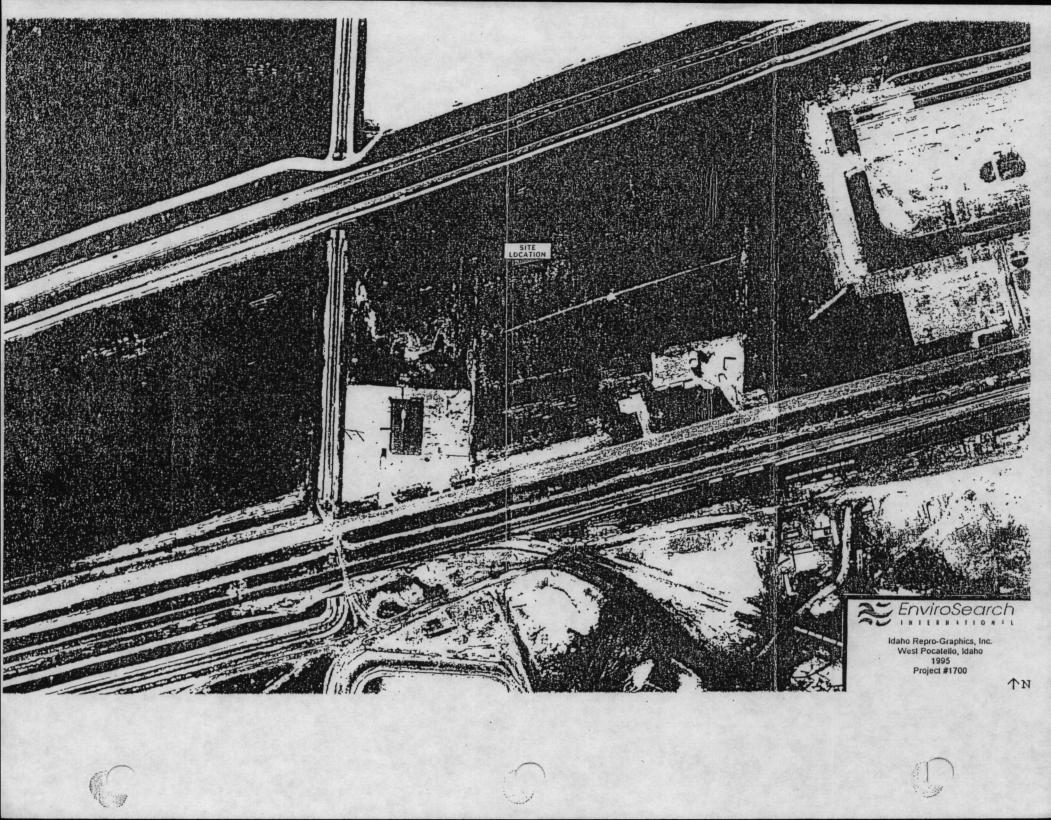
South Building Facade

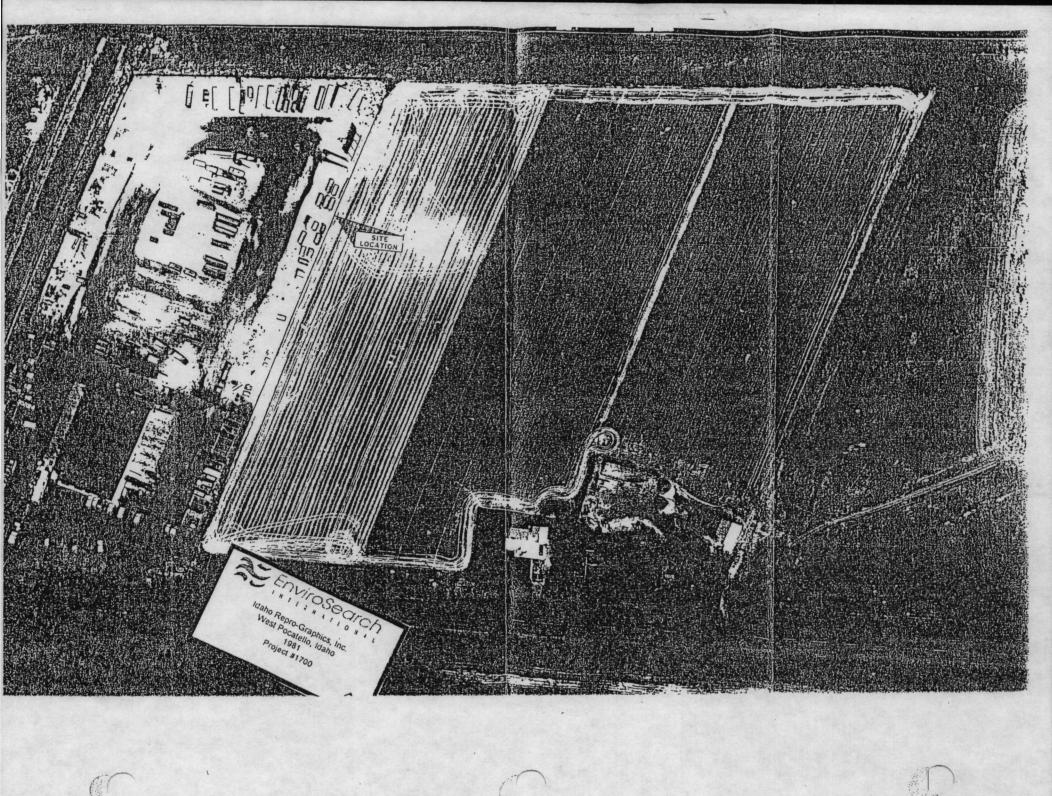


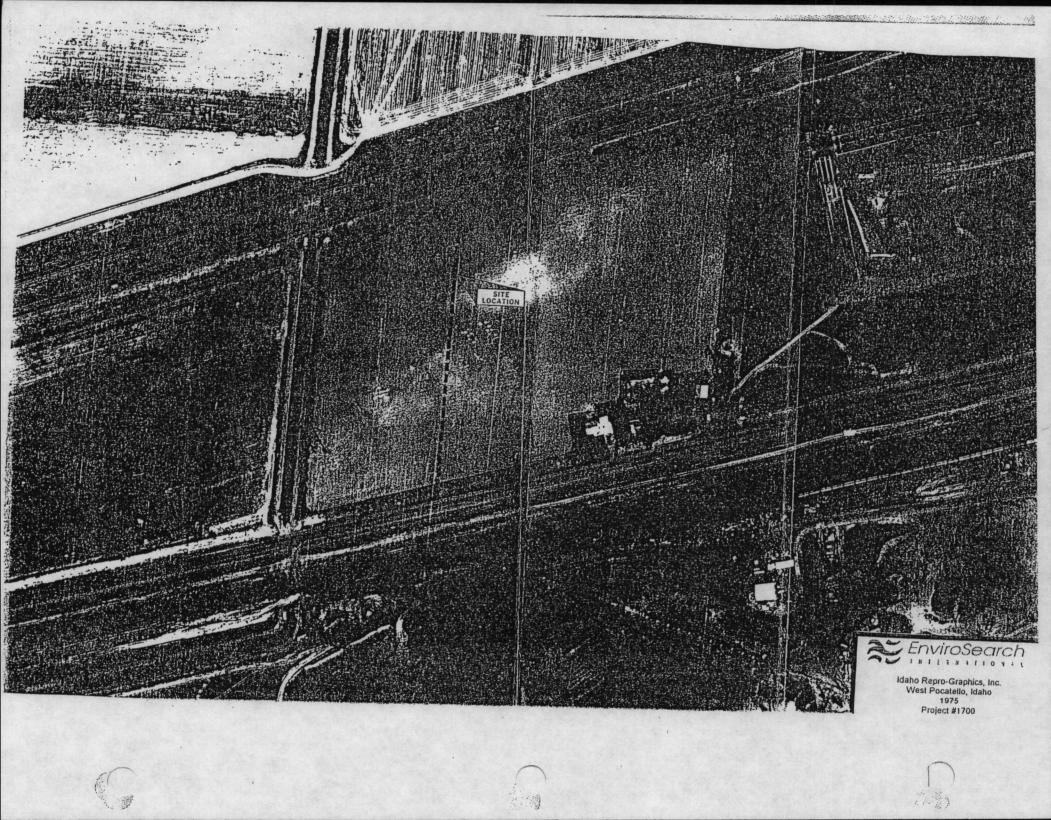
On Site Culinary Water Well



On Site Pad-Mounted Electrical Transformer





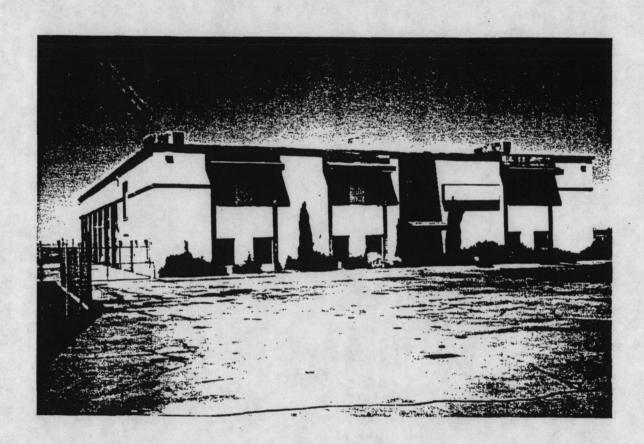


ENVIRONMENTAL SITE ASSESSMENT - PHASE II

1297 OLD HIGHWAY 30 WEST

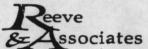
WEST OF POCATELLO, IDAHO

AUGUST - SEPTEMBER, 1996



Prepared for: Tesco American Inc.

Prepared by: Jerry K. Reeve, PE, CEI



Environmental Engineering & Management Consultants 147 S. Arthur Ave. Pocatello, Idaho 83204 Telephone or Fax: (208)-232-8565

TABLE OF CONTENTS

	PAGE
SUMMARY AND RECOMMENDATIONS	1
CERTIFICATION AND LIMITATIONS	1
INTRODUCTION	2
BACKGROUND INFORMATION SITE LOCATION MAP SITE PLAN SITE HISTORY AND LAND USE	3 4 5
PHASE II ACTIVITIES RECORDS REVIEW SURFACE CONTAMINATION GROUNDWATER AIR QUALITY FIELD EXPLORATIONS SURFACE SOILS WELL WATER SUB SURFACE SOILS UNDERGROUND STORAGE TANKS ASBESTOS CONTAINING MATERIALS	6 6 7 8 9 9 10 SEE APP. C
EVALUATION OF RESULTS SURFACE CONTAMINATION WELL WATER SUB SURFACE SOILS AND SLUDGES INTERIOR FLOOR DRAINS AND INTERCEPTOR UNDERGROUND STORAGE TANKS	11 12 13-17 17-18 18
FINDINGS AND CONCLUSIONS	19-20
	FIGURE
SITE SURFACE CONTAMINANT DIAGRAM SITE SAMPLE LOCATIONS	1 2
	APPENDIX
PHOTOGRAPH RECORD ASBESTOS-CONTAINING-MATERIALS INVESTIGATION SURFACE SOIL INVESTIGATION SAMPLE CHAIN OF CUSTODY AND LABORATORY REPORTS REFERENCE SOURCES OF INFORMATION	A B C D E

SUMMARY AND RECOMMENDATIONS

This report documents the Phase II Environmental Site Assessment conducted on the property known as 1297 Old Highway 30 West located West of the City of Pocatello, County of Power, Idaho.

Prior operations at the subject property initially involved truck maintenance activities; later operations involved precious metal recovery and fertilizer manufacturing activities. Wastes deposited on the site due to these activities were investigated for their hazardous nature and extent.

Hazardous wastes identified include about 1,900 cubic yards of material which is primarily identified as "treater dust" or a waste product of that material which may include other "ores". Other hazardous waste includes about 0.5 cubic yard of solid waste and 885 gallons of liquid (slurry) waste within the building's drainage system. Due to the quantity of identified hazardous waste, full compliance with all applicable hazardous waste management rules appears to be required.

An inspection for asbestos-containing-materials was also conducted. Approximately 3,000 square feet of sheet floor covering was identified to contain ACM. If planned demolition or remodeling activities involve more than 160 square feet of the noted sheet floor covering, all EPA notification requirements, emission control procedures and waste disposal requirements will apply.

Two underground storage tanks were found, one contains gasoline and the other was used to store hydraulic fluid. No leakage was detected. Regulations require closure of abandoned tanks.

The well was made operational and the water was tested and found to be satisfactory.

CERTIFICATION AND LIMITATIONS

I certify that this investigation was carried out in an independent and professional manner using guidelines commonly recognized for the conduct of such investigations. Reeve & Associates has exercised care and experience in evaluating the limited data available however we can not and do not represent that the site contains no hazardous material, petroleum products or other latent conditions beyond those observed during this assessment.

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JERRY K. REEVE, P.E. REEVE & ASSOCIATES

September 20, 1996

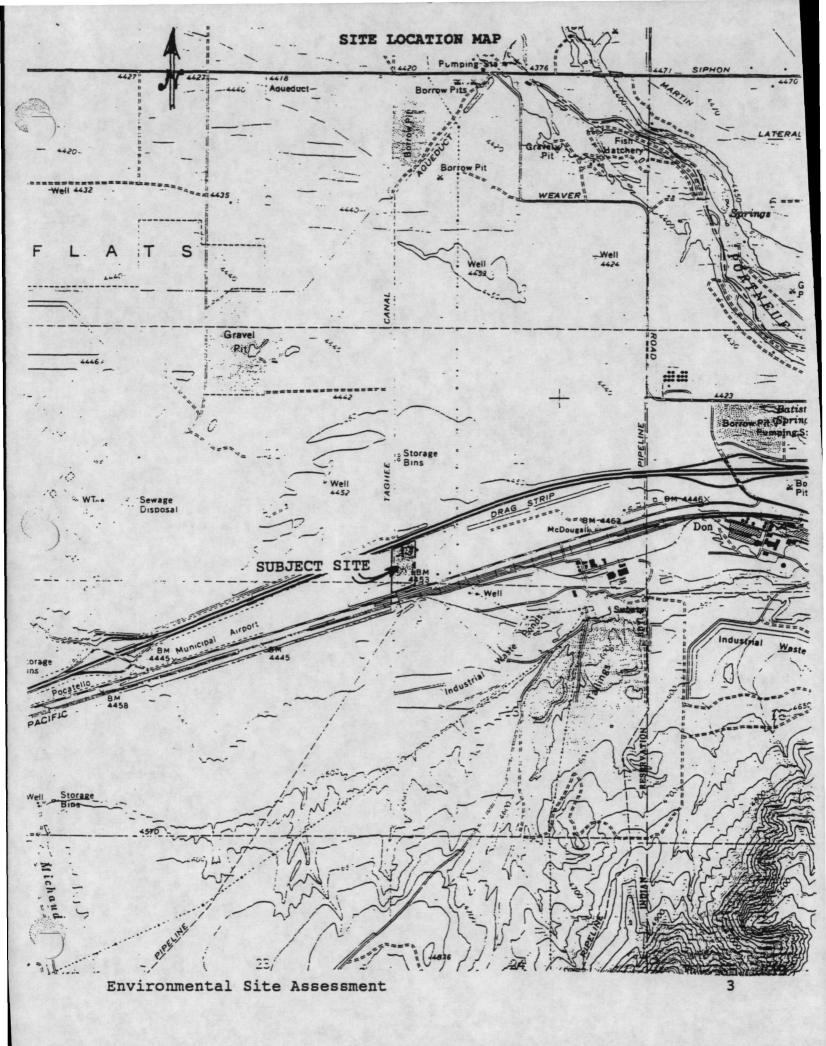
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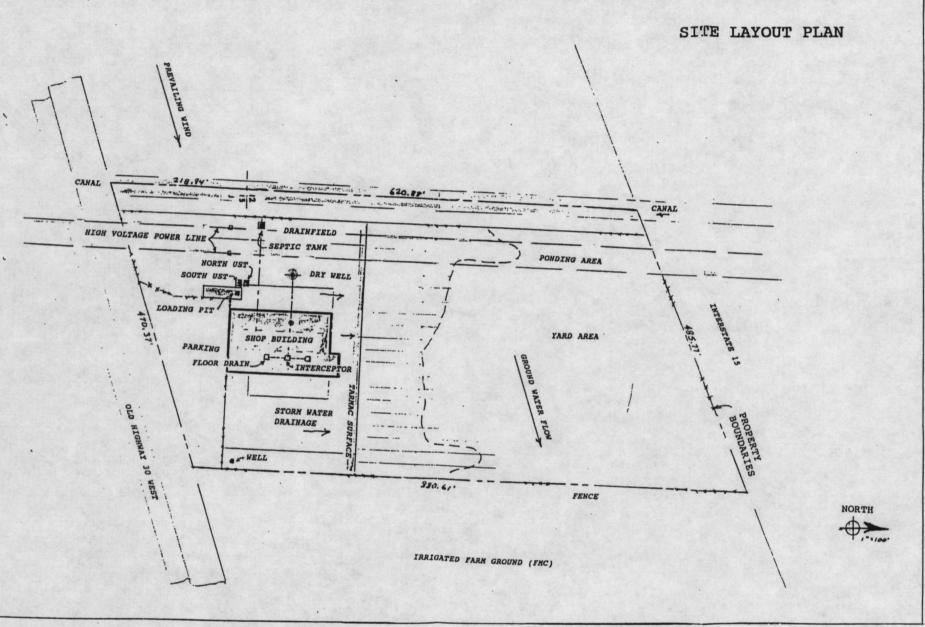
INTRODUCTION

A Phase II Environmental Assessment is performed if contamination is apparent or if disclosed during the Phase I Investigation. The Phase II assessment includes site exploration activities designed to identify and characterize the nature and extent of apparent contamination and establish the scope of remedial investigations.

This Phase II assessment consisted of the following activities:

- a. Review all existing data and reports including the findings of the Phase I Environmental Site Assessment.
- b. Systematically probe the soil surfaces to visually determine the depth of contaminated soil. The cleanup depth to be verified with samples analyzed for one or two components only Zinc and cadmium. Determine the amount of contaminated material to be considered for treatment and/or disposal from the site.
- d. Determine if the on site well is operational and sample the drinking water aquifer for any suspect pollutants.
- e. Review the upper aquifer sampling results of the adjacent monitoring wells to determine if any contribution from the site is apparent.
- f. Investigate for underground storage tanks. Any tank found is to be characterized for contents and externally sampled for leak detection.
- g. Open all interceptors within the building. Sample any contents and analyze for pollutants.
- h. Conduct an asbestos investigation. Sample and analyze ceiling tiles, hard surface floor coverings, adhesives and any other suspect building component.
- i. Review of applicable, relevant and appropriate requirements.
- j. Verification that a hazardous condition does or does not exist and the nature and extent of the contamination.
- k. Compilation of a written report summarizing the findings with recommendations for remediation and feasibility investigations if required.





Environmental Site Assessment

SITE HISTORY AND LAND USE

Operational History

The property was first developed during 1978 by Williamsen Trucking and the facilities were used for truck maintenance and repair. Tesco American obtained the property in a buy out of Williamsen Trucking and transferred ownership to Bidondo Inc. in 1993.

Allan Elias began operations at the site in 1985 as Industrial Refining and changed the name to AEI, Inc. in 1988. Elias operated a precious metal recovery operation and fertilizer manufacturing facility until about 1992. Electrostatic precipitator dust (treater dust), a by-product of FMC's nearby elemental phosphorus plant, was used as the primary feedstock. The treater dust has shown to be hazardous waste due to it's TCLP values for cadmium. It was excluded, however, from RCRA Subtitle C regulation under the Bevill Amendment until July 23, 1990. No treater dust was received after that date. Other feedstock materials used were indicated to be raw sulfur and ground phosphate rock. Other materials used in the process included sodium cyanide, zinc sulfate and sulfuric acid.

Land Use

Land use in the Chubbuck and Pocatello areas is zoned primarily for residential use. The closest area to the site that is zoned for residential use is approximately 3 miles east. This residential area is surrounded by various industrial, agricultural, and small commercial areas. Another residential area lies approximately 3 miles northeast in Chubbuck. The Pocatello Municipal Airport, which is annexed to the City of Pocatello, lies to the northwest of the facility. The airport is zoned as a special use district. It's annexed area is predominantly commercial and agricultural.

The FMC facility and the adjacent Simplot facility are zoned as industrial. Unincorporated land in Bannock and Power counties is mostly agricultural with scattered residences. Land use for the adjacent Fort Hall Indian Reservation lands is primarily agricultural.

Sub Surface Conditions:

Boring logs in the vicinity of the site describe the soils as tan fine silts ranging from 12 to 27 feet in thickness. Well logs describe underlying units of volcanic sandy gravel, tuff and tuffaceous silt with bedrock at about 150 feet below grade.

Ground water underlying the site is approximately 50 feet below grade in silty gravels. Reported ground water elevations indicate there is a seasonal fluctuation of about 2 feet.

Previous Assessments:

A Phase I Environmental Assessment conducted by EnviroSearch International (Nov. '95) recommended that testing be done to determine the extent of contamination from prior operations. That report and other EPA documented inspections are fully reviewed in the following section of this report.



PHASE II ACTIVITIES

RECORDS REVIEW

Surface contamination:

The Phase One Environmental Assessment report, developed by EnviroSearch International, reported that during an October 17, 1995 visit to the former A.E.I. Corp. facility a layer of FMC by-product was found to be spread about the undeveloped portion of the property North of the building. However, no measurements of depth of the by-product were recorded by EnviroSearch International. Samples of the by-product were collected on the above mentioned date and analytical results from American West Analytical Laboratories are presented in the report. According to this report, testing showed the by-product "feedstock" exceeded regulatory limits for cadmium through the use of Toxicity Characteristic Leaching Procedure (TCLP).

The Environmental Protection Agency (EPA) inspected the former A.E.I. Corp. facility on July 2, 1991. The inspectors sampled three stockpiles of material on the West side of the Pavement. In the report written by Michael Silverman it is stated that subsequent analysis showed all samples collected from the stockpiles to be non-hazardous. Craig Paulson's report, which covered the same inspection of the former AEI site, states that ore samples collected exceeded Maximum Contaminant Levels (MCL) for arsenic, cadmium, chromium, and selenium.

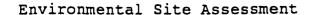
Officials of the EPA, IDEQ, and the Shoshone-Bannock Tribe conducted a fence-line inspection of the site on September 2, 1993. Their report acknowledged the presence of "ore or treater dust" north of the building beyond the pavement. Due to lack of access to the site, no samples were collected.

Subsequent to the foregoing inspection, the EPA issued a draft preliminary assessment dated October 29, 1993 which reviewed available data. The assessment could not document any on-site solid materials or wastes as being hazardous. An EPA transmittal letter dated November 29, 1993 stated that ".. it appears that past operations have resulted in the release of some hazardous substances to the ground and possibly the subsurface..".

Groundwater:

EnviroSearch reported in the Phase One Environmental Assessment that the groundwater at the site is approximately 54 feet below grade, and as such, it is not likely that small petroleum spills or leaks at the surface would impact groundwater.

The report also mentions that in the event the sumps located inside the building are connected to a storage system, the threat of groundwater contamination is possible. This report lists the contaminants of concern that are associated with FMC and Simplot potential release sources. The contaminants of concern include heavy metals such as cadmium, total chromium, vanadium, lead, and zinc, as well as fluoride, phosphate and sulfate.



Moreover, it is stated that groundwater contamination at the FMC/Simplot site appears to be concentrated in an area north and east of the waste water ponds and is reportedly contained in the upper aquifer. The Phase I Environmental Assessment lists the floor sumps and the chemicals used on site for metals extraction as the two main potentials for groundwater contamination.

The EPA inspection conducted on July 2, 1991 involved the Underground Injection Control (UIC) program. The purpose of this inspection was to inventory material potentially entering injection wells on Indian Reservations in EPA Region 10. It is stated that UIC inspectors were primarily interested in material that may have entered into the facility's septic tank or dry well via the shop's drainage system. Subsequent analysis showed that a sample taken from the inside floor drain contained 9.8 mg/L total cadmium using the TCLP extraction procedure. It was also noted that the limit for cadmium is 1.0 mg/L. Craig Paulson noted in his report the MCLs were exceeded for cadmium, lead, selenium, and silver with respect to the liquid sample analyzed.

Contained in the EPA draft preliminary assessment is section 3.1 groundwater. The report states that the City of Pocatello has one deep-aquifer well within 4 miles of the former A.E.I. Corp site. The town of Chubbuck has two wells that are within 4 miles of the above mentioned site, as well as several subdivisions within 2.5 miles that have public wells. In this report it is stated that constituents may have been released to groundwater or surface water from site operations at A.E.I.. It is also noted that concentrations were probably relatively low and it is unlikely that these substances would reach any water supplies.

A report named "EMF Site Characterization Summary" was reviewed. Eastern Michaud Flats encompasses the FMC/Simplot property located near the A.E.I. Corp site. This report contains several years of data concerning wells in the local area. Data for the Lindley Domestic Well was reviewed because the well is on the property bordering the East fence line of the A.E.I. Corp. site. 1980 groundwater analysis show elevated levels of phosphorus as compared to the analysis of the Williamsen well. 1981 sampling showed that the Lindley well had elevated levels of sodium and chloride. These same result were seen during a sampling of the well in 1988.

Air Ouality:

Over the past 20 years, air quality monitoring has been conducted at FMC and Simplot for total suspended particulate (TSP) matter, sulfur dioxide, and fluorides. Due to monitoring of the area for TSP, the area surrounding FMC and Simplot is designated as TSP Non-Attainment Area. Sulfur Dioxide monitoring has shown that threshold concentrations for SO2 are met per federal ambient air quality standards. Fluoride monitoring has shown that elevated levels of fluoride are present in the immediate area. Airborne deposition of nine elements were found to be impacting soils in the area. Beryllium, fluorine, iron, lead, lithium, potassium, rubidium, thorium and zinc all were present at elevated levels in surrounding soils.

PHASE II ACTIVITIES (CONTINUED)

FIELD EXPLORATIONS

Surface Soils Measurement and Sampling:
Visual observation readily indicates the deposition of a gray material throughout the site. The material is recognized as precipitator (treater) dust originating from the FMC elemental phosphorus plant. In order to quantify the amount of this material spread to the north of the unpaved area, a grid system was developed which separated the area into 20 foot square sections. The origin point A zero (A,0) begins at the Northwest edge of the asphalt (pavement) area. Survey stakes were used to section off each of the 20 foot increments mentioned above.

A backhoe was used to probe the soil at each reference stake throughout the grid system. Visual inspection combined with physical measurement determined the interface between the soil and treater dust. After all depths throughout the staked area were known, volume calculations were made by partitioning the area into six separate sections and combining their volumes to determine the total amount of treater dust present.

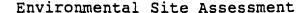
If the treater dust is to be moved, a certain amount of over stripping into the underlying soil will be required. Over stripping volumes were also calculated for each 6 inches of soil which may need to be removed.

In addition to the graded area North of the asphalt (pavement) that is partitioned into 20 foot increments, there are three treater dust piles which are located approximately 170 feet south of the north fence line. The three treater dust piles were visually inspected and physical measurements were recorded to calculate the volume present to be added to the total.

Within the asphalt (pavement) area there exists five separate below grade trenches which have various depths and widths. Each of the trenches was measured for depth and width and their volume calculated for addition to the total.

The frontage area to the south of the building as well as the surrounding fence line of the property has various depths and widths of treater dust present. The frontage area was visually inspected and physical measurements were recorded to calculate the volume present. The relevant areas of the fence line were also measured, recorded, and calculated to add to the total volume.

Average soil (over stripping) volumes were also calculated for the treater dust piles, treater dust trenches, treater dust in the frontage area, and the treater dust present along the fence line surrounding the property.



Well Water - Sampling:

Once the well was up and running, it was determined that only one faucet was functional. It was located in the main wash room. With the faucet completely open and connected to a small hose, it was determined that 8 gallons of water per minute was being removed. Ten well casing volumes of water were selected as the total volume to be pumped prior to sampling the well. Ten well volumes equated to 3,790 gallons of water, therefore, at a removal rate of 8 gal/min, it was determined that 8 hours of continuous pumping was required. At the time of sampling, the hose was disconnected and samples were collected from the faucet directly. Three samples were collected in separate containers to allow for specific testing. The metals that were selected for testing included arsenic, cadmium, selenium, and sodium. One individual sample was collected to test for cyanide. Other parameters that were tested for included alkalinity, pH, total phosphorus, nitrates, sulfates, and two ions: chloride and fluoride.

Sub-Surface Soils - Sampling:

The first phase of the soil sampling was conducted on the surface contamination area located North of the pavement. Nine individual samples were collected and designated through the use of the reference stakes placed at 20 foot increments. All nine samples were collected as an undisturbed sample, using a drive core sampler. Nine sampling points were selected to provide overall coverage of the surface contamination area.

The individual samples were collected one inch bellow the soil/ppt dust interface. This method was selected to determine what concentration of cadmium and zinc would be present in the underlying soil. Cadmium and zinc were selected for testing because they are two dominant elements found in FMC ppt dust.

The second phase of soil sampling was conducted at select points throughout the entire site. Hawley Brothers located in Blackfoot Idaho was contracted to provide core drilling during this sampling event. Hawley Brothers drill rig was equipped with a rotary drill used to drill test holes and a drive core sampler for collection of samples.

The first location that was sampled was the drywell exterior. A test hole was drilled alongside the drywell outer wall, through the outer packing/backfill material. This material was installed during construction of the drywell. A drive core sample was collected at a depth of 15 feet, 19 feet, and 22 feet at this location. Dan Hawley drilled all test holes, and collected all drive core samples with the drill rig. Jeff Treasure performed all cleaning, preparatory work, handling of samples, and transfer of samples to laboratory containers. Labeling, preservation of samples, chain of custody forms, and shipment of samples to Alchem Laboratories. Following collection of samples the test hole was closed by Dan Hawley, the test hole was first filled with medium bentonite chips and then backfilled with existing material from the test hole.

The second test hole was drilled in the center of the drywell interior by accessing the drywell through the manhole cover. The drywell contents was sampled at a depth of 5 feet, and 10 feet. Drilling was required to reach these depths, because the interior contents was a soil/backfill solid material. Here again Dan Hawley collected the drive core samples via the use of the drill rig. Jeff Treasure performed all Cleaning, preparatory work, handling of samples, and transfer of samples to laboratory containers. This handling and collection procedure was followed consistently throughout the entire sampling event.

The next test area was the septic tank and drain field location. The first sample collected was a sludge sample from the septic tank. The manhole located approximately 143 feet from the West side of the building was removed to provide access to the septic tank. The septic tank sample was collected at a depth of 12 feet.

Following the septic tank sampling, a test hole was drilled to the North of the above mentioned manhole cover into the drain field. A drive core sample was collected at a depth of 10 feet, and at a depth of 15 feet. The test hole was closed using medium bentonite chips followed by backfill with existing material from the test hole.

The loading pit was the last location where the drill rig was used. The loading pit is located near the SouthWest corner of the building and is approximately four feet below grade. In this location a manhole cover was removed to provide access to the inner drain. Test hole drilling proved to be unsuccessful at this location, and a depth of 2.5 feet was all that could be accomplished. Large rocks were removed by hand and Jeff Treasure collected a hand drive core sample at 2.5 feet.

The surface pond area is located in the NorthWest portion of the property approximately 150 feet from the NorthWest fence corner post. Idaho Power transformer station power lines are suspended directly over the area. Therefore, due to the height of the drill rig no test could be drill using the equipment. The test hole was drilled with a hand auger to a depth of 5 feet. Jeff Treasure drilled the test hole and collected the drive core sample. No bentonite chips were used at this location, the test hole was closed with existing material removed with the auger.

<u>Underground Storage Tanks - Sampling for Leakage:</u>

Hawley Brothers rotary drill was used to drill test holes alongside both the South and North underground storage tanks. Drive core samples were collected on both tanks at a depth of 5 feet and 10 feet. Dan Hawley used the drill rig to collect the drive core samples, Jeff Treasure performed all cleaning, preparatory work, Handling of samples, and transfer of samples to laboratory containers. The test holes were each filled with medium bentonite chips and then backfilled with existing material from the test hole.

EVALUATION OF RESULTS

SURFACE CONTAMINATION

The volume of gray colored material, recognized to be precipitator (treater) dust or processed waste, which is accumulated throughout the site has been calculated and reported as follows:

Treater dust volumes:

Staked area North of Asphalt (pavement)	1,744 Cubic Yards
Piles	88 Cubic Yards
Trenches '	15 Cubic Yards
Frontage and Fence line	55 Cubic Yards

Total Treater Dust Volume = 1,902 Cubic Yards

Underlying soil (over stripping) volumes: Per each 6" extra depth

Staked area North of Asphalt (pavement)

Piles 17 Cubic Yards

Piles 17 Cubic Yards

Trenches 9 Cubic Yards

Frontage and Fence line 77 Cubic Yards

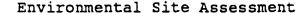
Total Underlying Soil Volume = 1,398 Cubic Yards per each 6"

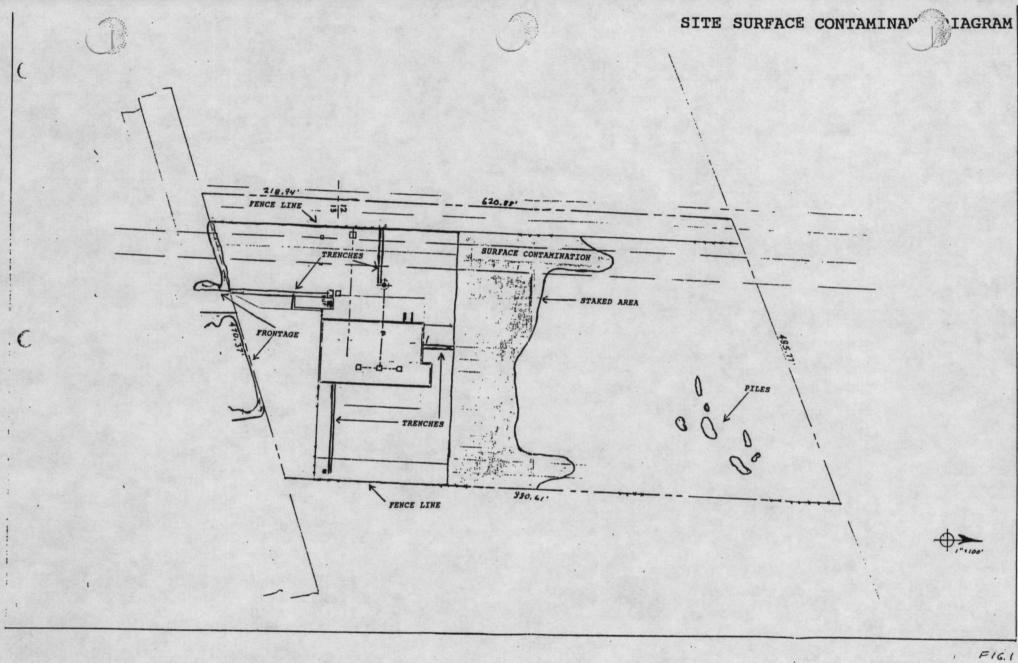
Interface soil samples:

Interface soil samples taken at he bottom of the treater dust layer were typified using cadmium and zinc analyses only. Typical treater dust will analyze for cadmium at 3,200 - 6,500 mg/kg and for zinc at 55,000 - 89,000 mg/kg. Background surface soil concentrations would typified for cadmium at 4.9 mg/kg and for zinc at 89.7 mg/kg. The samples analyzed as follows:

300 gla

Surface Contamination	Cadmium	Zinc
B2	545.0 mg/kg	99.0 mg/kg
A10 ,	1,220.0 mg/kg	22,900.0 mg/kg
B18	710.0 mg/kg	8,890.0 mg/kg
D4	1,010.0 mg/kg	4,070.0 mg/kg
C11	1.64 mg/kg	72.7 mg/kg
D15	2.29 mg/kg	74.9 mg/kg
H17	257.0 mg/kg	1,240.0 mg/kg
Н8	594.0 mg/kg	507.0 mg/kg
M2	29.9 mg/kg	425.0 mg/kg





WELL WATER

Laboratory results of the Tesco (Williamsen) well water sample were compared to reported laboratory results on three monitoring wells owned by F.M.C. and sampled by Bechtel. Also a "Superfund" publication known as "EMF Site Characterization Summary (Jan 1994)" was used for comparison of water chemistry. Table A-3 was used because it provided laboratory results from five surrounding wells. The Lindley Domestic well, located next to the Tesco site, was one of the five wells. Table A-4 was also used because it provided analysis of twelve wells, all of which are categorized as comparable spring group or spring. The Williamsen (Tesco) well and the Lindley well were both part of the twelve wells in Table A-4. Maximum Allowable Concentrations for domestic water supplies, published in the Administrative Rules Of The Idaho Department Of Health And Welfare were also used for comparison of the Tesco well water. The Tesco well water results showed that no regulatory limits were exceeded.

Water Chemistry Results

Analysis Parameters	Tesco well 8/29/96	Lindley well Table A-3	Williamsen well Table A-4	FMC Monitoring well 521	Maximum Allowable Conc.
alkalinity	143.0	227.0	160	NA	NA
Arsenic	0.005	NA	NA	0.00413	0.050
Cadmium	<0.0005	NA	NA	NA	0.010
Chloride	19.8	195	20	NA	NA
Cyanide	0.006	NA	NA	NA	0.200
Fluoride	0.67	0.49	0.6	0.828	NA
Nitrate	0.58	4.7	0.45	0.79	10.00
Selenium	<0.005	NA	NA	0.0035	0.010
Sodium	20.5	103.6	21	NA	No Max
Sulfate	45.1	93.0	41	41	NA
Total Phosphorus	0.02	<.035	NA	0.02	NA
рН	7.65	NA	NA	7.62	NA

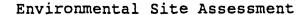
All values recorded in table have units of mg/L.

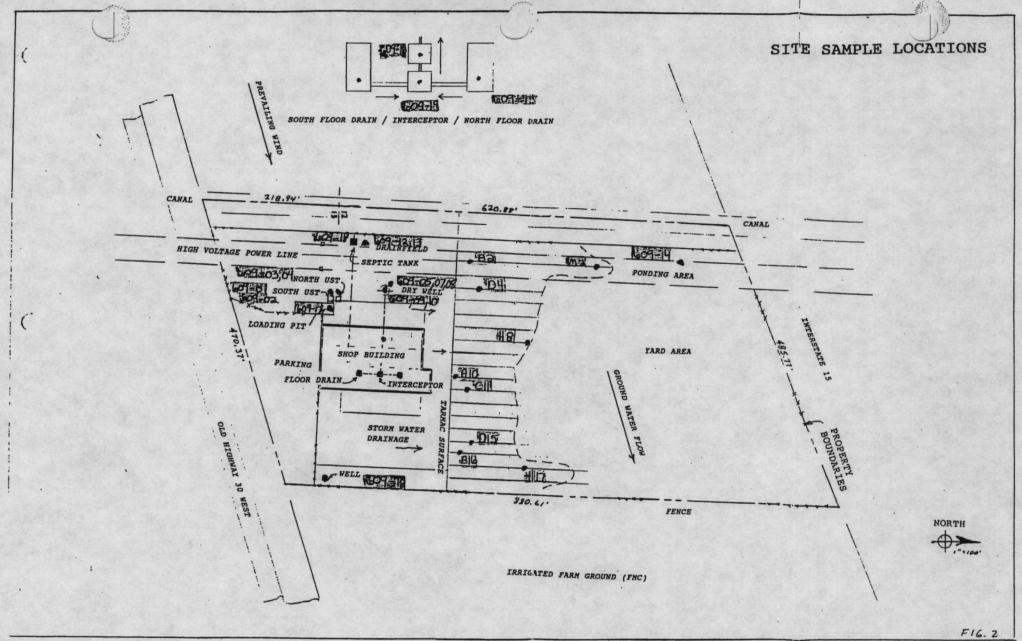
SUB SURFACE SOILS AND SLUDGES

Several suspected points of contamination were sampled at the Tesco site to evaluate levels of contamination present. Toxicity Characteristic Leaching Procedure (TCLP) was selected as the Laboratory method used to evaluate soil/sludge samples collected at the:

- *Drywell interior contents
- *Drywell exterior
- *Loading pit
- *Septic tank
- *Drain field
- *Surface ponding area
- *North floor drain and the
- *Interceptor outlet.

Parameters Analyzed	Regulatory Limits (40 CFR 261.24)
Arsenic	5.0 ppm
Cadmium	1.0 ppm
Chromium	5.0 ppm
Copper	NA
Lead	5.0 ppm
Mercury	0.2 ppm
Molybdenum	NA
Nickel	NA
Selenium	1.0 ppm
Silver	5.0 ppm
Vanadium	NA
Zinc	NA





Environmental Site Assessment

SUB SURFACE SOILS AND SLUDGES (CONTINUED)

Highlighted values exceed regulatory limits.

Drywell Exterior	Drywell Ext @ 15FT	Drywell Ext @ 19FT	Drywell Ext @ 22FT
Arsenic	<0.015	<0.015	<0.015
Cadmium	0.446	0.184	0.271
Chromium	0.011	<0.006	0.028
Copper	<0.03	0.04	<0.03
Lead	0.023	0.055	0.011
Mercury	<0.0002	<0.0002	<0.0002
Molybdenum	<0.03	<0.03	0.04
Nickel	0.022	0.013	0.035
Selenium	<0.015	<0.015	<0.015
Silver	<0.006	<0.006	<0.006
Vanadium	0.05	0.04	<0.03
Zinc	5.05	1.05	1.87

Drywell Exterior	Drywell Ext 0	Drywell Ext @ 19FT	Drywell Ext @ 22FT
Cyanide Total	8.89 mg/kg	0.47 mg/kg	0.66 mg/kg
Nitrate as N	<1.10 mg/kg	<1.05 mg/kg	<1.05 mg/kg
Total Phosphorus as P	2370.0 mg/kg	561.0 mg/kg	1,150.0 mg/kg



Drywell Contents	Drywell cont @ 5FT	Drywell cont @ 10Ft
Arsenic	<0.015	<0.015
Cadmium	1.82	0.565
Chromium	0.008	0.014
Copper	0.42	0.16
Lead	<0.006	<0.006
Mercury	<0.0002	<0.0002
Molybdenum	<0.03	0.07
Nickel	0.084	0.108
Selenium	<0.015	<0.015
Silver	<0.006	<0.006
Vanadium	0.21	0.13
Zinc	11.9	14.1

Drywell Contents	Drywell Cont @ 5FT	Drywell Cont @ 10FT
Cyanide Total	3.87 mg/kg	2.37 mg/kg
Nitrate as N	2.68 mg/kg	<12.0 mg/kg
Total Phosphorus as P	4700 mg/kg	15,400.0 mg/kg

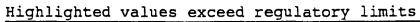


SUB SURFACE SOILS AND SLUDGES (CONTINUED)

Highlighted values exceed regulatory limits

Septic Tank & Drain Field	Septic Tank 0 12Ft	Drain Field @ 10FT	Drain Field 0 15FT
Arsenic	<0.015	<0.015	<0.015
Cadmium	0.0239	0.0284	0.0918
Chromium	0.156	0.008	0.009
Copper	<0.03	<0.03	<0.03
Lead	0.011	<0.006	<0.006
Mercury	<0.0002	<0.0002	<0.0002
Molybdenum	0.01	<0.03	<0.03
Nickel	0.252	<0.009	0.020
Selenium	<0.015	<0.015	<0.015
Silver	<0.006	<0.006	<0.006
Vanadium	0.59	<0.03	<0.03
Zinc	5.30	0.177	0.659

Septic Tank & Drain Field	Septic Tank 0 12FT	Drain Field @ 10FT	Drain Field @ 15FT
Cyanide Total	14.6 mg/kg	8.25 mg/kg	0.31 mg/kg
Nitrate as N	<3.28 mg/kg	<1.03 mg/kg	1.98 mg/kg
Total Phosphorus as P	41,400.0 mg/kg	171.0 mg/kg	249.0 mg/kg



Surface Pond, North Floor Drain, Loading Pit	Surface Pond	North Floor Drain	Loading Pit
Arsenic	<0.015	0.104	<0.015
Cadmium	0.0038	42.1	0.754
Chromium	<0.006	0.100	<0.006
Copper	<0.03	18.5	<0.03
Lead	<0.006	0.409	<0.006
Mercury	<0.0002	0.0002	<0.0002
Molybdenum	<0.03	0.05	<0.03
Nickel	<0.009	0.291	0.026
Selenium	<0.015	0.082	<0.015
Silver	<0.006	0.284	<0.006
Vanadium	<0.03	0.62	<0.03
Zinc	0.011	479.0	64.0

Surface Pond, North Floor Drain, Loading Pit	Surface Pond	North Floor Drain	Loading Pit	Interceptor Outlet
Cyanide Total	1.20 mg/kg	5,730.0 mg/kg	0.32 mg/kg	71,700.0 mg/kg
Nitrate as N	<1.08 mg/kg	<3.90 mg/kg	1.39 mg/kg	<6.01 mg/kg
Total Phosphorus as P	361.0 mg/kg	67,400.0 mg/kg	4,930.0 mg/kg	48,800.0 mg/kg

INTERIOR FLOOR DRAINS AND INTERCEPTOR

Interceptor Liquid:

Interceptor Liquid Analysis Parameters	Interceptor Liquid	Maximum Allowable Concentration
Alkalinity	99.0 mg/L	NA
Arsenic	0.236 mg/L	0.050 mg/L
Cadmium	21.9 mg/L	0.010 mg/L
Chloride	1340.0 mg/L	NA
Cyanide Total	25.9 mg/L	0.200 mg/L
Fluoride	227.0 mg/L	NA
Nitrate as N	0.64	10.00 mg/L
Selenium	0.609 mg/L	0.010 mg/L
Sodium	735.0 mg/L	No Max
Sulfate	2490.0 mg/L	NA
Total Phosphorus	272.0 mg/L	NA
рн	5.70 mg/L	NA

UNDERGROUND STORAGE TANKS

South and North Underground Storage Tanks

U'ground Storage Tanks Parameters	South UST (gasoline) @ 5FT	South UST (gasoline) @ 10FT	North UST Hydraulic Fluid @ 5FT	North UST Hydraulic Fluid @ 10FT
TPH (gasoline)	<10.0 mg/kg	<10.0 mg/kg	·	
TPH (Diesel)	<10.0 mg/kg	<10.0 mg/kg		
TRPH Hydraulic Fluid		·	49.0 mg/kg	12.5 mg/kg

FINDINGS AND CONCLUSIONS

Documents Review:

A review of all accessible data and reports was conducted. The precipitator dust "feedstock" was shown to exceed regulatory limits for cadmium using the TCLP procedure. On-site sampling and TCLP analysis of surface wastes confirmed them to be hazardous wastes due to cadmium levels.

Previous investigations of the interior drainage system showed MCLs (maximum contaminant limits) to be exceeded for cadmium, lead, selenium and silver for the liquids tested. Other potential contaminants of concern were noted to be cyanide, chromium, vanadium, zinc, fluoride, phosphate and sulfate. There was concern that these liquids could contaminate the groundwater through the drywell or septic drainage systems.

Air quality in the area is affected by the nearby plants. The site is within a TSP (Total suspended solids) Non Attainment Area. Elevated levels of fluoride are present in the immediate area. Airborne deposition of beryllium, fluorine, iron, lead, lithium, potassium, rubidium, thorium and zinc were found to be present at elevated levels in surrounding soils.

Surface contamination of soils:

The soil surfaces which are visually impacted by contaminant material were probed to determine the depth and type of contaminant. Depths up to 24 inches were measured. The total volume of surface contaminant material which is accumulated throughout the site was calculated to be 1,900 cubic yards.

Samples taken at the interface of the contaminant material and the native soil indicated that over-stripping would be necessary if removal of the contaminant is done. It was calculated that the additional contaminated soil would be 1,400 cubic yards for each 6 inches of extra depth.

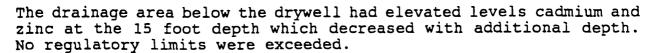
Well:

The on site well was made operational and it's water was sampled and analyzed for suspect pollutants. The water quality was essentially unchanged from prior results and no regulatory limits were exceeded.

Sub surface soils:

Samples were collected throughout the site by drilling and coresampling to determined depths. The selected locations were the drywell, septic tank and it's drainfield, loading pit, and a surface ponding area. Analysis was conducted for the suspect contaminants of concern.

The drywell contents exceeded regulatory limits for cadmium at the 5 foot depth with lesser content at the 10 foot depth.



The septic tank solids sample was foul smelling, analyzed high in phosphate content, but no regulatory limits were exceeded. The septic tank drainfield showed relatively low levels of all contaminants except cyanide which tested at 8.25 mg/kg.

The loading pit sample had an elevated cadmium content, however no regulatory limits were exceeded.

The surface ponding area sample showed negligible levels of the contaminants of concern.

Underground storage tanks:

An investigation for underground storage tanks discovered two unreported tanks. One tank contains about 9 inches of gasoline. The other tank contains only a small amount of hydraulic fluid. The size of the tanks was not determined. Test holes were externally drilled and sampled for detection of any probable leakage. Results indicated that there was no leakage detected.

Interior floor drains and interceptor:

The solid waste contained in the north floor drain is classified as a hazardous waste due to it's TCLP analysis for cadmium. A relatively high level of cyanide is also present. There is an estimated amount of 0.5 cubic yards (3 barrels) of this waste.

The liquid (slurry) waste contained in the south floor drain, interceptor, manhole and connected piping exceeded MCL regulatory limits for <u>all</u> parameters tested. Cyanide levels are high. There is an estimated amount of 885 gallons (17 barrels) of this waste.

Asbestos-containing-materials:

An asbestos investigation was conducted and reported in Appendix B. Suspect building component were sampled and analyzed for asbestos content. The results indicated that about 3,000 square feet of sheet floor covering contains 40% chrysotile type asbestos.

Applicable, relevant and appropriate requirements:

During the course of this investigation, the following deficiencies were noted:

- * There is no record of application for a U.S. EPA identification number or a notification of hazardous waste activity.
- * The two underground storage tanks have not been registered with the State of Idaho as required by federal law. Abandoned tanks are required to be closed.

APPENDIX A

PHOTOGRAPH RECORD

AUGUST - SEPTEMBER, 1996



Photo #1: Existing building, paved area, typical perimeter fencing.



Photo #2: Tyhee Canal and electrical transmission lines run parallel to the west property boundary. Interstate 86, in the background, along the north property boundary.

Environmental Site Assessment



Photo #3: SE corner of property. FMC property begins at edge of pavement. Highway 30 borders south frontage.

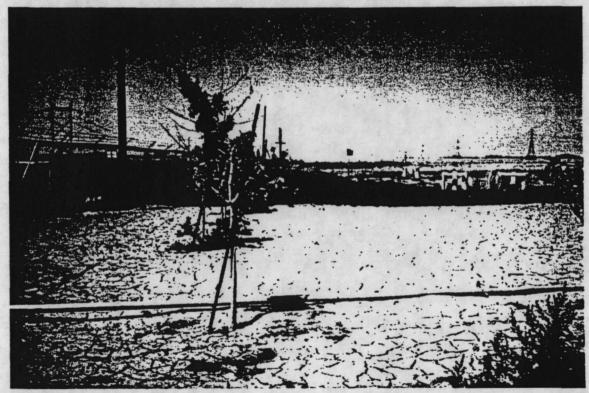


Photo #4: The subject site's well is located inside the fence line on the left. Three of FMC's monitoring wells are shown at the right.

Environmental Site Assessment

PHOTOGRAPHS



Photo #5: Waste material deposited on property frontage at SW corner along Highway 30.

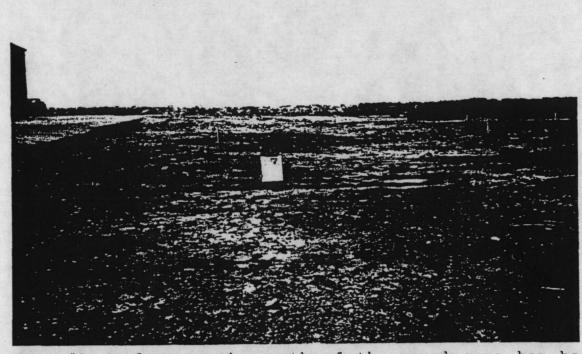


Photo #6: Surface to the north of the paved area has been covered with gray waste material.



Photo #7: A backhoe was used to probe the surface allowing visual inspections and physical measurements.



Photo #8: Surface was probed at 20 foot intervals to determine the interface between the waste material and the native soil.

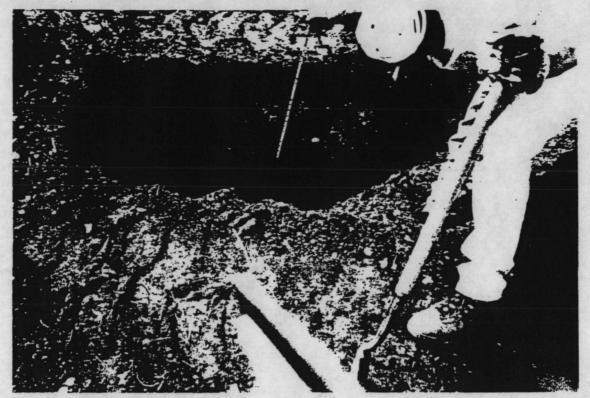


Photo #9: Waste material was over 2 feet deep in some locations.

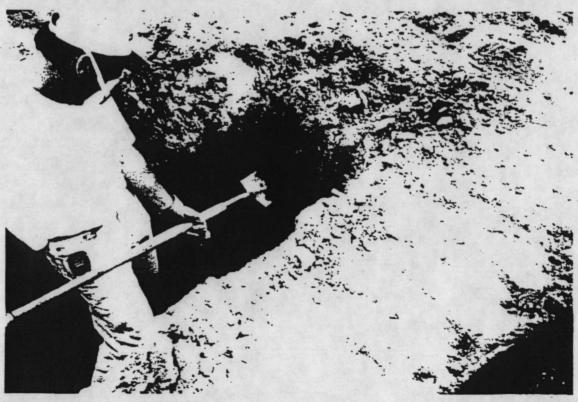


Photo #10: Light gray waste material with a vein of black sludge was found is several locations.



Photo #11: Decontamination of the backhoe was accomplished by scraping and rinsing.

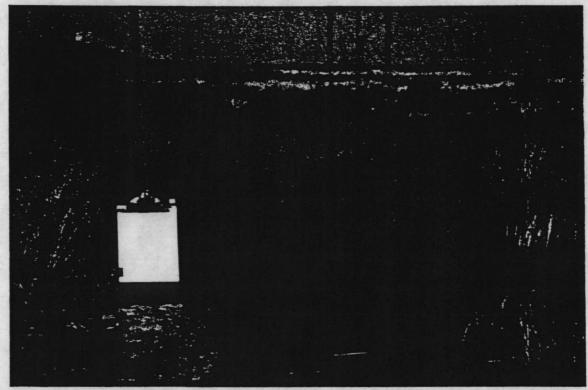


Photo #12: Surface ponding occurs in the northwest corner of the site due to irrigation water run-on along the north fence line.

PHOTOGRAPHS

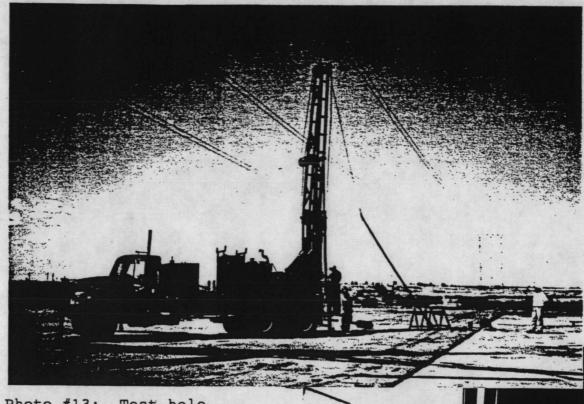
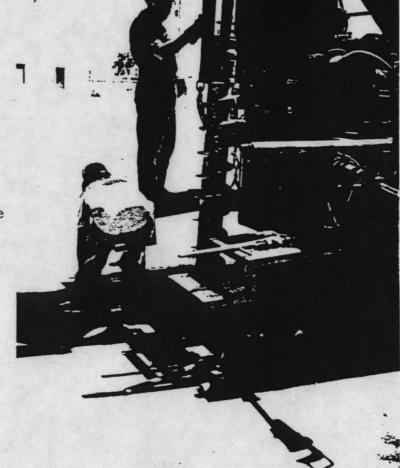


Photo #13: Test hole drilling at the drywell.

Photo #14: Test holes were drilled using an 8" auger.



PHOTOGRAPHS



Photo #15: Drive core samples were taken at selected depths.

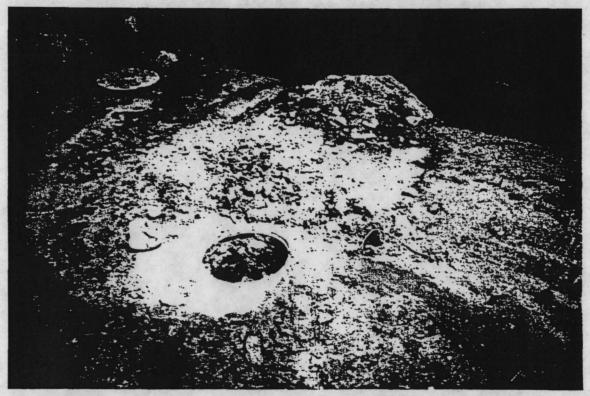


Photo #16: Loading pit sump was exposed and drilled for a soil sample. Rocks limited drilling depth.

ENVIRONMENTAL SITE INVESTIGATION

ASBESTOS-CONTAINING-MATERIALS

1297 OLD HIGHWAY 30 WEST WEST OF POCATELLO, IDAHO

AUGUST, 1996

Prepared by: Jerry K. Reeve, PE, CEI

TABLE OF CONTENTS

	PAGE
SUMMARY OF FINDINGS AND RECOMMENDATIONS	i
CERTIFICATION AND LIMITATIONS	1
BUILDING LAYOUT AND SAMPLE LOCATIONS	. 2
ASBESTOS SAMPLE CHAIN OF CUSTODY	3
REPORT OF SAMPLE ANALYSIS	4-5
PHOTOGRAPHS	6

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This report documents the investigation for asbestos conducted on the property known as 1297 Old Highway 30 West located west of the city limits of Pocatello and situated in Power County, Idaho.

A review of the site's prior operations indicate that the current building was constructed about 1978 for use as a truck maintenance and repair facility.

This asbestos survey was conducted on the existing building as a part of the overall Phase II Environmental Assessment on the complete property.

Our inspection indicated fiberglass insulation within the building and on the piping. Several building components were sampled and tested as potential Asbestos Containing Materials (ACM's). Samples that were tested and identified to exceed the regulated amount of 1% asbestos included the sheet floor covering on the first floor entry and lab areas and on the second floor warehouse area. Analytical results for these floor coverings indicated a 40% Chrysotile type asbestos content.

It is estimated that the building contains about 3,000 square feet of the asbestos-containing sheet floor covering. Most of this covering is in good condition.

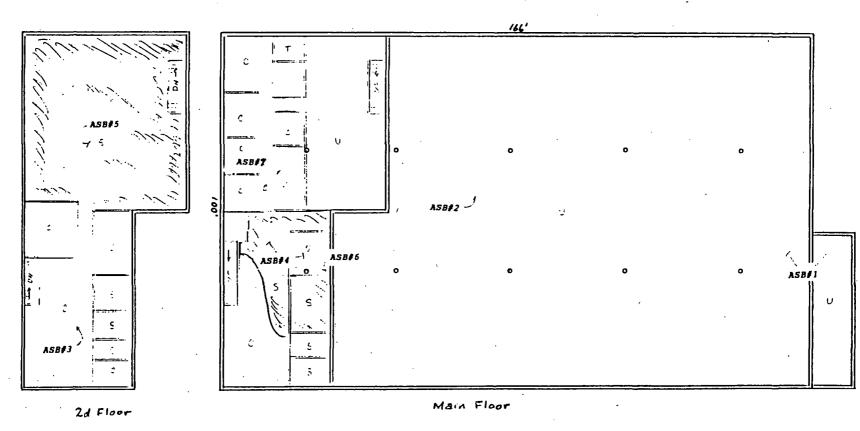
Asbestos NESHAP regulations must be followed for all renovations of facilities with at least 260 linear feet of regulated asbestos-containing materials on pipes, or 160 square feet of regulated asbestos-containing materials on other facility components or at least 35 cubic feet of asbestos-containing materials. Therefore, if planned demolition or remodeling activities involve more than 160 square feet of the noted sheet floor covering, all notification requirements, emission control procedures and waste disposal requirements will apply.

CERTIFICATION AND LIMITATIONS

I certify that this investigation was carried out in an independent and professional manner using guidelines commonly recognized for the conduct of such investigations. Reeve & Associates has exercised care and experience in evaluating the limited scope of this investigation and we can not and do not represent that the site contains no asbestos-containing-materials beyond those observed during this assessment.

JERRY K. REEVE, P.E.

REEVE & ASSOCIATES



ASBESTOS SAMPLE LOCATIONS

C:Carpet
U:unfinished
5: Sheet Covering

SAMPLE CHAIN OF CUSTODY

SURVEY: 12 SAMPLER: J	97 East County Road erry Reeve DAT	E: August 8, 1996
SAMPLE #	DESCRIPTION	LOCATION
1	BUILT UP ROOFING	ROOF SURFACING
2	OLDER CEILING TILE	MAIN SHOP
3	CEILING TILE	OFFICE LOBBY - UP
4	SHEET FLOOR COVERING	ENTRY, LAB
· 5	SHEET FLOOR COVERING	2ND FLOOR WAREHOUSE
6	BASE ADHESIVE	LAB
7 *******	CARPET ADHESIVE	ALL CARPETED ROOMS
INSTRUCTION	S TO LAB: Test for asbest	os content
	Fax results to	208-232-8565
	Mail results to Reeve & Associa 147 S. Arthur A Pocatello, Idah	tes ve.
******	*********	******
RELINGUSHED	BY: RECEIVED BY:	DATE / TIME:
DISPATCHED	BY: Jerry Reeve	_ August 8, 1996 5:00 pm
METHOD OF S	HIPMENT: U.S. Postal Service	, Priority Mail
SHIPPING AD	DRESS: EMSL ANALYTICAL Attention: Scott Wal Harbor Marina Corpor 1001 SW Klickitat Wa Seattle, Washington	ate Center y, Suite 107
RECEIVED FO	R LABORATORY BY: Shary H	when 5-12-96 3:35 pm



Reeve & Associates 147 S. Arthur Avenue Pocatello, ID 83204

Wednesday, August 21, 1996

Ref Number: SE96849

POLARIZED LIGHT MICROSCOPY (PLM)

Project: 1297 East County Road

			SAMPLE	<u>ASBESTOS</u>	NONASB	ESTOS
SAMPLE	LOCATION	APPEARANCE	TREATMENT	% TYPE	% FIBROUS	% NONFIBROUS
#1	Built up roofing, roof surfacing	Grey/Tan/Black Fibrous Homogeneous	Teased/Dissolved	None Detected	50% Cellulose	50% Other
#2	Older ceiling tile, main shop	Grey/White Fibrous Homogeneous	Teased	None Detected	60% Cellulose 10% Min. Wool	20% Other 10% Perlite
#3	Ceiling tile, office lobby - up	Grey/White Fibrous Homogeneous	Teased	None Detected	70% Cellulose 10% Min. Wool	20% Other
#4	Sheet floor covering, entry, lab	Brown/Grey Fibrous Homogeneous	Teased	40% Chrysotile	10% Cellulose	50% Other
#5 	Sheet floor covering, 2nd floor warehouse	Grey/Tan Fibrous Homogeneous	Teased	40% Chrysotile	10% Cellulose	50% Other
#6	Base adhesive, lab	Brown/Tan Fibrous Homogeneous	Teased	None Detected	75% Cellulose	25% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

Straughn Zimmermann

Analyst

Laboratory Supervisor Other Approved Signatory

Disclaimers: PLM has been known to miss asbestos in a small percentage of samples which contain asbestos. Thus negative PLM results cannot be guaranteed. Floor tides and wipes should be tested with either SEM or TEM. The above test report relates only to the items tested. This report may only be reproduced in full with written approval by EMSL. The above test must not be used by the client to claim product endorsement by NVLAP nor any agency of the United States Government, All "NVLAP" reports with NVLAP logo must contain at least one signature to be valid. Laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.



Total

Piscataway, I

Carlo Place, I

Kashettan, J

407.775.8223

San Matre.

Amyraa, SA

910-297-1427

Bouston, TX

EMSE 996

Reeve & Associates 147 S. Arthur Avenue Pocatello, ID 83204 Wednesday, August 21, 1996

Ref Number: SE96849

POLARIZED LIGHT MICROSCOPY (PLM)

Project: 1297 East County Road

	•			SAMPLE	ASB	ESTOS		NONASB	<u>ESTOS</u>	
	SAMPLE	LOCATION	APPEARANCE	TREATMENT	%	TYPE	%	FIBROUS	%	NONFIBROUS
#7		Carpet adhesive, all carpeted rooms	Brown/White Non-Fibrous	Teased	No	one Detected	25%	Cellulose	75%	6 Other
		•	Homogeneous							

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

Straughn Zimmermann

Laboratory Supervisor Other Approved Signatory

W. W. W.

Disclaimers: PLM has been known to miss asbestos in a small percentage of samples which contain asbestos. Thus negative PLM results cannot be guaranteed. Floor tiles and wipes should be tested with either SEM or TEM. The above test report relates only to the items tested. This report may only be reproduced in full with written approval by EMSL. The above test must not be used by the client to claim product endorsement by NVLAP nor any agency of the United States Government. All "NVLAP" reports with NVLAP logo must contain at least one signature to be valid. Laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

5

PHOTOGRAPHS

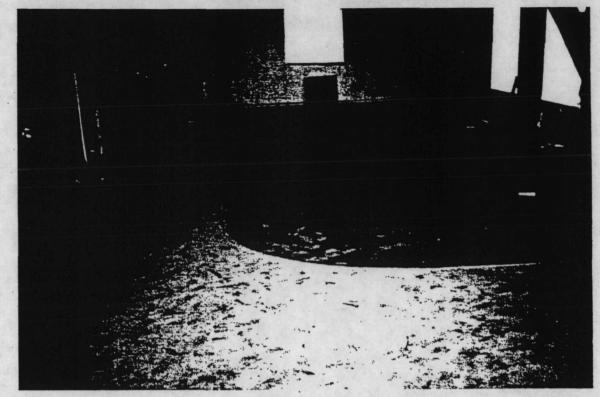


Photo #ASB4: Sheet flooring at entry & lab contains asbestos.

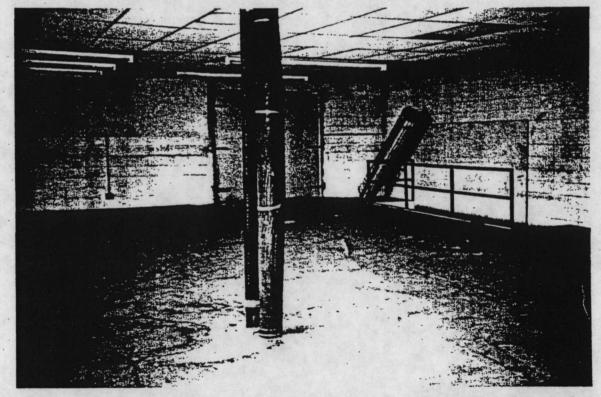


Photo #ASB5: Sheet flooring at 2nd floor warehouse contains asbestos.

APPENDIX C

SURFACE SOILS INVESTIGATION WORK PLAN AND FIELD NOTES

REEVE & ASSOCIATES

SUBJECT: Former A.E.I. Corp. Facility, 1297 East County Road, West Pocatello, Idaho. Phase II Environmental assessment

Work Plan: Following a grid system consisting of staked field plots, the area to the north of the asphalt (tarmac) at the above mentioned location will be systematically probed via the use of a backhoe. The backhoe will be used to dig below existing grade conditions in an attempt to visually determine the depth of the contaminant. Samples will also be collected at the same time.

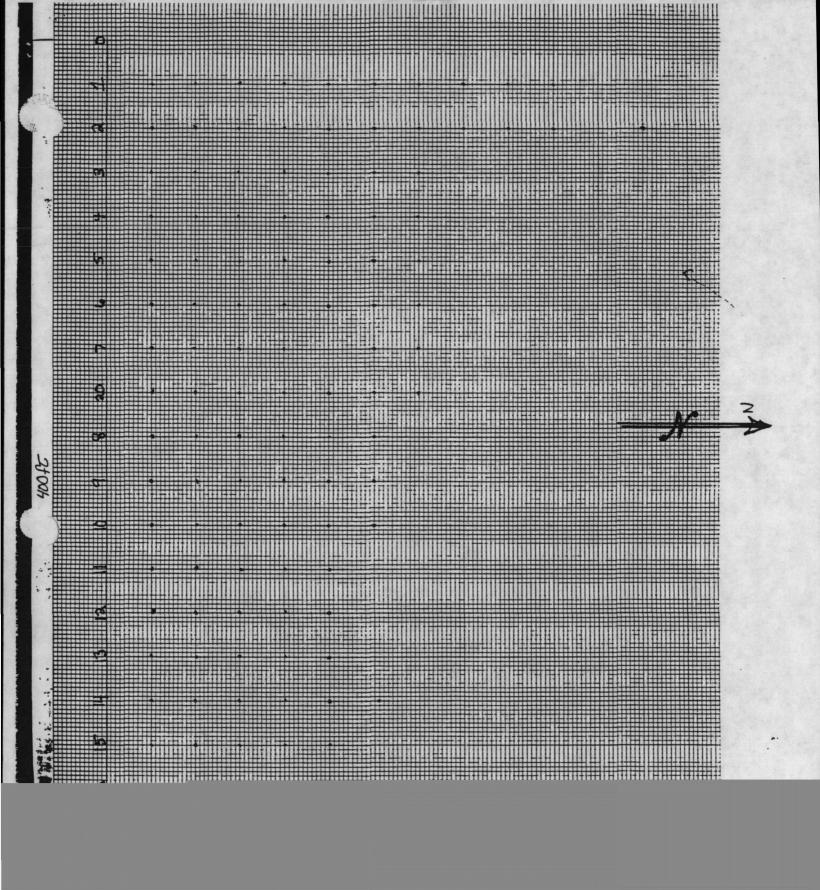
The backhoe that will be used on site will be completely washed prior to entering the gate on Monday morning July 29, 1996. The backhoe operator will be informed by Jeff Treasure of Reeve & Associates as to the work plan and all steps that will be taken on the site for the given day. Echo dust masks will be worn during operation of the backhoe to eliminate inhalation of any loose particulate. A small wind sock will be used to determine wind direction throughout the operation. The backhoe will be operated from an upwind position to minimize worker exposure moreover slow and minimal digging will be the method used in an effort to keep the site undisturbed. Jeff Treasure will also wear an Echo dust mask during this operation.

At the end of the operation the backhoe will be washed of with a light water/soap solution sprayed on the machine using a general garden sprayer. Any loose material that is present on the dig bucket will be scraped of with a putty-knife and then it will also be washed with the above mentioned solution. Ten gallons of fresh water will be on site and will be used in the garden sprayer to remove the soap solution.

Backhoe Operator: Jeff Treasure will monitor the operator for heat stress every hour throughout the job as well as perform periodic checks of his dust mask. Ambient temperatures will likely be above 90 degrees F therefore, gatorade or water will be provided to the operator every hour to eliminate dehydration. Jeff Treasure will visually see that the operator performs a double wash of his hands prior to taking a lunch break. Jeff Treasure will provide Eye protection for the operator as well. Dust masks will be kept on site in a plastic container following the operation. Jeff Treasure will also instruct the backhoe operator to shower at his home following the days work which will include a phone call to confirm this on the same day as the work.

Emergency Plan: Jeff Treasure will be accompanied to the site by Keri Treasure and Keri will remain in the work truck during digging operations. Keri will have a cellular phone in the truck with a backup battery and a phone book including instructions to leave the site and call 911 and the firemarshal in the event of an emergency. Ten gallons of water will be in the truck including a first-aid kit and a fire extinguisher.

FIELD WORK PLAN - SURFACE SOIL MEASUREMENTS - JULY 29, 1996



Reeve & Associates

Through the readers signature bellow the reader acknowledges that Jeff Treasure of Reeve & Associates has provided a copy of a report dated September 5, 1991 that was issued by the Environmental Protection Agency concerning the A.E.I. Corp located at 1297 E. County Road Pocatello, Idaho 83202. In addition to this Jeff Treasure has provided a copy of the work plan that sites the scheduled events for the work day including other relevant information. Jeff Treasure has also clearly informed the reader that the waste product located at 1297 E. County Road Pocatello Idaho was initially Electrostatic Precipitator Dust which is a result of emission controls implemented at an unknown process at FMC corporation.

Signature Print: MIKE SOUTHAINI
Signature Sign:

SURFACE SOIL MEASUREMENTS -

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Environmental Assessment - Tesco Site

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POSITION	TREATER DUST (in)	SOIL TYPE		OTHER CO	MMENTS
hl	().	s and	icum		
h2	ل ا	Ci 1	1 }	المراثان	tan r
h3	5.5) [Ü	11
h4	/	- 1)1	i١	!
h5	÷	U	١;	\ :	1 \
h6	4.5	\./		. (1	
h7	3	N. 1	1 :	(i	Ì
h20	.3	\ \ \	11	l C	
h8	3	Ç	\ \		
h9				·	
h10					
h11					
h12					
h13					
h14					
h15					
h16		·			
h17					-
h18					
h19					



POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS	
i1				
i2				
i3				
i4				
i5				
i6				
i7				
i20	5		Ciap non	C. 100 5
i8				سر عن
i9				
i10				
i11				
i12				
i13	·			
i14				
i15				
il6			·	·
i17				
i18	1.5			
i19				

POSITION	TREATER DUST (in) SOIL TYPE	OTHER COMMENTS
j1	65		
j2	.5		
j3			
j4			
j5			
j6			
j7			
j20			
j8			
j9			
j10			
jll			
j12			
j13			
j14			
j15	·		
jl6			
j17		المناسخ الم	Den
j18			·
j19			

POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS	
il				
i2				l
i3				
i4				
i5				
i6				
i7				
i20	5		Ciap ner	100000 100000
i8				الم المتراجعة
i9				
i10				
i11				
i12				
i13			·	
i14	·			
i15				
il6				
i17			·	
i18	6			
i19	·			

POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS
jl	45	·	
j2	1.5		
j3			
j4	·		·
j5			
j6			
j7			
j20	·		
j8			
j9			
j10			·
j11		<u>.</u>	
j12			·
j13			
j14			
j15			
j16			
j17		Sources war	
j18			·
j19			

POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS
kl	1,0		
k2	W/ 2.5		
ј3			
k4	-		
k5			
k6			
k7			
k20			
k8			
k9			
k10			
k11			
k12		`	
k13			
k14			
k15			
k16			
k17		Sandina	
k18			
k19		·	



POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS
L1			
L.2			
L3			
L4			
L5			
L6			
L7			·
L20			
L8			
L9			
L10			
L11			
L12			
L13		·	
L14			
L15			·
L16			
L17			
L18			
T 10			

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POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS
kl	1,0	·	
k2	10 2.5	·	
j3			
k4			
k5			
k6			
k7			
k20			
k8			
k9			·
k10,			
k11			
k12			
k13			
k14	·	·	
k15			`
k16			
k17		Sandlow	
k18			
k19			



POSITION	TREATER DUST (in)	SOIL TYPE	OTHER COMMENTS
L1			
L2			
L3			
L4			
L5			
L6			
L7			
L20			
L8			
L9			
L10			
L11			
L12			
L13			
L14			
L15			
L16		· ·	
L17			
L18			
L19			· · · · · · · · · · · · · · · · · · ·

M275

APPENDIX D

SAMPLE CHAIN OF CUSTODY
AND

LABORATORY ANALYTICAL REPORTS

			·				نصد															
REEVE & ASSOCIATES Address JERRY K. REEVE PE. 147 S. ARTHUR AVE. POCATELLO, ID 832P4								AB(C	ATT	E OR	N N		- 1 8	104 W Boise, Phone	est 3	11st S 10 83	treet		<u>:-</u>		
City			State Zip Code	1		YPE O		1	} —	<u></u>				TE	STS							_
	pler(s)		TREASURE			157		17.77	6.0			TCLP makerates	S (GC/MS)									CONTAINERS
	Cha	ain of	Custody Form					Hali	C) TPH			ragan	STATILE									ER OF C
LAB NUMBER	DATE	TIME	SAMPLE IDENTIFICA	ATION	WATER	(الله	ОТНЕЯ	8TEX 418 1 (1.8.) TPH	8015 (G.(VOC'S TPH-G	라 다 다	TCLP 7	SEMI-VC		1	H	KW:					NCMB
10th	10 Jul 96		609-DI South UST	£ 51	,	V			V													
1842	10 1446	9:24	609-02 South UST	e 10'		1			1								.					
1043	10 Fez 46	9400	609-03 North UST	e 5"		•		v	1													
4644	10 Fat 46	9234	809-04 No. 4 UST	410		-		6-	11													_
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RELINQUISHED BY (Signature) DATE 13 Aug 9		DATE	TIME RECEIVED BY (Signa							ture)	1 1		I I I									
		13 4496		<u>/</u>	Pm.																	
elinquishe	ed By (Signatur	re)	Date/Time	Received for Labora	atory B	ly _. (Sigr	nature)		<u> </u>		Date/			a :	Rec tab	eived		Seal I	ntactí	۔ ' تا '	Yes C	 1 No 1 No

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Address

REEVE & ASSOCIATES JERRY K. REEVE P.E. 147 8. ARTHUR AVE. POCATELLO, ID 83204

City

State

1 Zip Code . . .



TESTS

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172

1		
Sampler(s)	JEFF TREASURE	
Project or Site	+604 - TESCO SITE	

Chain	of	Custody	Form

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LAB NUMBER	DATE	TIME	SAMPLE ID	ENTIFICATION	WATER	Sol	OTHER	BTEX 418.1 (8015 (G.C VOC's	TPH-G	HCID TCLP -	SEMI-	#1	37	₹				NUMBE
11357	950296	203.11	604-05 DRynie	U Exr @ 15'		V					1		1		;/				
11277	950.46	33º	649-07 "	n @/4"		j.					•								
	4 JUL46	45	609-68 "	11 88 22-1		ľ					\\ \' \								
11.20 kg	<u>4</u>	5 2.1	604-04 Dzy.	The Constants 05		i.					i		A	٠ ١٠٠٠ ١					
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118342	10 Suc4	11 350	609-11 SEPT	c TAUR @ 121									4	-					
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TYPE OF

SAMPLE

Received for Laboratory By (Signature) Relinquished By (Signature) Date/Time Date/Time

Received With Seal Intact? Li Yes Li No Label Tay, COC Agree? Li Yes Li No

NUMBER OF CONTAINERS

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Address

Caly

REEVE & ASSOCIATES JERRY K. REEVE PE 147 S. ARTHUR AVE POCATELLO, ID 83204

400 04





Alchem Labor ____les, Inc.

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172

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Samp Propo	ot or Site #	609-1	Custody Form					тън (びげんし (12)-	ATILES (GC/MS)					
LAB NUMBER		· - ·	SAMPLE IDENTIFICATION	WATER	SOIL	OTHER	BTEX	416.1 (I.R.) 8015 (G.C.)	VOC's TPH-G	TPH-D	TOLP - MY FEL	SEMI-VOL	Ho	12.5	11/13		
187.5	DATE Any 12 Fa. 96 11 11 11 11 11 11 13 Any 96	4 pm	604-14 SURFACE POWD & 5"		V		- -						,/		•-		
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Relinquished By (Signature)

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12 Aug 6 6 Pm

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DATE

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RELINQUISHED BY (Signature)

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Name

Address

REEVE & ASSOCIATES JERRY K. REEVE P.E. 147 8. ARTHUR AVE. POCATELLO, ID 83204 | State

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Alchem Laboi les, Inc.

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172

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Samp Projec	tor Site	Jeff 1 3 609	REASURE TESCO SITE									9	aC/MS)				#					TAINERS	
۱ .	Cha		Custody Form	11	\ \		~	LOT CO	8015 (G.C.) TPH			Ser nithin 6	CLANES (C	21			001 4	M				NUMBER OF CONTAINERS	
LAB NUMBER	DATE	TIME	SAMPLE IDENT	IFICATION	WATER	SOIL	ОТНЕЯ	BTEX 418 1	8015 ((VOC's	O-HGT		SEMI-	Ö	Γ_{μ}	3 2	N	× ×				NON	
1915			ivell ivater	609-18) >							V	V		-	1	ا سا	-					
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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES ATTN: JERRY REEVE 147 S. ARTHUR POCATELLO, IDAHO 83204 DATE COLLECTED: C

08/10/96 08/14/96

DATE REPORTED:

08/16/96

SUBMITTED: JEFF TREASURE

PROJECT OR SITE: 609 - TESCO SITE / SOIL

TOTAL PETROLEUM HYDROCARBONS (Method 8015 modified)

Date Analyzeg: 08/15/96

Analyst: S. PALSULICH

Lab No.	Sample I.D.	Time Collected	TPH Results
11841	609-01 SOUTH UST @ 5'	08:35	<10.0 mg/kg (G) <10.0 mg/kg (D)
11842	609-02 SOUTH UST @ 10'	09:00	<10.0 mg/kg (G) <10.0 mg/kg (D)

(G) = Gasoline

(D) = Diesel

izanne Howell, Laboratory Manager

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Anaiysis

LABORATORY REPORT

REEVE AND ASSOCIATES ATTN: JERRY REEVE 147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: DATE RECEIVED: 08/10/96

DATE REPORTED:

08/14/96 08/15/96

SUBMITTED: JEFF TREASURE

PROJECT: #609-TESCO SITE / SOIL

TOTAL PETROLEUM HYDROCARBONS (Method 418.1)

Date Analyzed: 08/15/96

Analyst: H. Rice

<u>Lab No. Sample I.D.</u>

Time Collected

TPH Results

11843 609-03 NORTH UST @ 5'

09:40

49.0 mg/kg

11844 609-04 NORTH UST @ 10'

09:55

12.5 mg/kg

Syzanne Howell, Laboratory Manager

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104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES

ATTENTION: JERRY REEVE

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/09/96

TIME COLLECTED - - -2:00

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-05 DRYWELL EXT @ 15' / TCLP / SOIL / TESCO SITE

LAB SAMPLE NUMBER - 11857

Results reported unless noted: (Chemistry Analysis as mg/1) (Sactoria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	(0. 015	08/27/96	=M
CADMIUM	0.446	08/27/96	₽M
CHROMIUM	0.011	08/27/96	F'M
COPPER	(0.03	08/27/96	₽M
LEAD	e.oes	08/27/96	<i>፫</i> ነላ1
MERCURY	10.0002	09/10/96	SQ
MOLYBDENUM	ಳ≎. ಕತ	08/27/96	<i>⊊M</i>
NICKEL	ru o <u>ee</u>	- <i>08/27/96</i>	₽M
GELENIUM	(0.015	08/27/96	<i>⊏'M</i>
BILVER	(0.00s	08/27/96	FM
'/ANADIUM	o. os	08/27/96	. <i>FM</i>
IINC _i	5.05	08/27/96	₽M

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Suranne Howell, Laboratory Manager







104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/09/96

TIME COLLECTED: 2:00

DATE RECEIVED: 08/14/96

DATE REPORTED: 08/29/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-05 DRYWELL EXT @ 15' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11845

Percent Moisture = 9.1%

ANALYSIS

RESULTS (mg/kg)

RESULTS (mg/kg)

wet wt.

dry wt.

CYANIDE, TOTAL NITRATE as N 3.08

8.89

TOTAL PHOSPHOSUS as P

2150.0

2370.0

oH (SU) - - - : 8.30

zanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES

ATTENTION: JERRY REEVE

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/09/96

TIME COLLECTED - - -3:30

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-07 DRYWELL EXT @ 19' / TCLP / SOIL / TESCO SITE

LAB SAMPLE NUMBER - 11858

Results reported unless noted: (Chémistry Analysis as mg/l) (Bacteria as promisms/100 ml)

ANALYSIS	TESUL TS	DATE ANALYZED	ANALYST
PRSENIC)8/20/96	F:M
CADMIUM	o. 194	08/20/96	FM
SHROMIUM	(O. 00E	08/20/96	FM
s derrer	0.0 4	08/20/95	FM
_EAD). (55	08/20/96	.⊏/M
JAERCURY	:0.000 <u>2</u>	09710795	SA
MOLYBDENUM	. O.O.	98/20.19£	FM
VICKEL	. 01B	<i>08/20/95</i>	₽M
PILINIUM	<i>33.845</i>	08/20/96	₽M
TILVER	10.00 5	<i>99729796</i>	. ≓M
'ANADIUM	. , 💥 4	09/20/96	₽M.
IINC	<u></u>	08/20/96	,=' <i>\</i> \

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Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/09/96

TIME COLLECTED: 3:30

DATE RECEIVED: 08/14/96

DATE REPORTED: 08/29/96 SUBMITTED: JEFF TREASURE

SOURCE: 609-07 DRYWELL EXT @ 19' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11846

Percent Moisture = 5.1%

ANALYSIS RE

RESULTS (mg/kg)
wet wt.

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL NITRATE DE N

NITRATE as N

0.45

0.47

TOTAL PHOSPHOSUS as P

532.0

561.0

oH (SU) - - - + : 8.10

Syzanhe Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES 147 S. ARTHUR POCATELLO, IDAHO .

83204

DATE COLLECTED - - - 08/09/96

TIME COLLECTED - - -4:05

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

ATTENTION: JERRY REEVE SOURCE -: 609-08 DRYWELL EXT @ 22' / TCLP / SOIL / TESCO SITE

LAB SAMPLE NUMBER - 11859

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ol)

· ANALYSIS	RESULTS	DATE ANALYIED	ANALYST
ARSENIC	(0, 015	08/20/95	FM
CADMIUM	0.E71	08/20/96	<u> Fipj</u>
CHROMIUM	c. o <u>e</u> s	08/20/96	PM
DOPPER	10.03	08/20/96	₽M
\ <u>LEAD</u>	0.011	08/20/96	וחיב
) MERCURY	(0.000 <u>2</u>	09/10/96	<i>ទជ</i>
MOLYBDENUM 1	0.04	9 8 720798	<i>541</i>
NICKEL	3.72 5	08/20/96	₽M
SELENIUM	10.315	<i>08/20/96</i>	PM
SILYER	:0. 00s	08/20/95	₽M
MANADIMM	.o. oz	08/20/96	,#PM
ZINC		08/20/95	₽M .

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Howell, Laboratory Manager







104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 .Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/09/96

TIME COLLECTED: 4:05

DATE RECEIVED: 08/14/96
DATE REPORTED: 08/29/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-08 DRYWELL EXT @ 22' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11847

Percent Moisture = 4.5%

ANALYSIS RESULTS (mg/kg) RESULTS (mg/kg) wet wt. dry wt.

wet wt. dry wt

 CYANIDE, TOTAL
 0.63
 0.66

 NITRATE as N
 <1.00</td>
 <1.05</td>

 TOTAL PHOSPHOSUS as P
 1100.0
 1150.0

pH(SU) - - - : 7.75

Suranne Howell, Laboratory Manager

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES

ATTENTION: JERRY REEVE

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - -08/09/96

TIME COLLECTED - - -5:05

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-09 DRYWELL CONTENTS @ 5'/ TCLP / SOIL / TESCO SITE

LAB SAMPLE NUMBER - 11860

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	<i>RESULTS</i>	DATE ANALYZED	ANALYST
^ ARSENIC	(0.015)	08/20/96	.F'M
CADMIUM	1.02	08/20/96	₽M
CHROMIUM .	0.008	08/20/96	FM
COPPER	0.42	08/20/96	-, ₽M
LEAD	(0.006	08/20/96	₽M
MERCURY	(0.0002	09/10/96	<i>50</i>
MOLYBDENUM :	(0.03	08/20/96	₽M
NICKEL	o. 034	08/20/96	₽M
SELENIUM	(0.015	08/20/96	PM
SILVER	:0.008	08/20/96	₽M
VANADIUM	O. 21	08/20/96	. FM
IINC	2220	08/22/96	FM

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Suzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

08/29/96

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

ATTN: JERRY REEVE 147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/09/96

DATE REPORTED:

TIME COLLECTED: 5:05

DATE RECEIVED: 08/14/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-09 DRYWELL CONTENTS @ 5' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11848

Percent Moisture = 6.4%

ANALYSIS

RESULTS (ma/kg)

RESULTS (mg/kg)

wet wt.

dry wt.

CYANIDE, TOTAL

NITRATE as N

3.62 2.51 3.87 2.68

TOTAL PHOSPHOSUS as P

4400.0

4700.0

68 /611) - - - - 6 50

dzanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES
147 S. ARTHUR

ATTENTION: JERRY REEVE

POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/09/96

TIME COLLECTED - - -5:45

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-10 DRYWELL CONTENTS @ 10'/ TCLP / SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11861

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

PNALYDIS .	REGULTE	DATE ANALYZED	ANALYST
GREENIC	:0.015	Q8/27/195	.⊃M
SADMIUM	<i>::. ISS</i>	08/27/96	₽M
CHROMIUM	<i>3.01</i> ≠	08/27/96	₽M
SSPPER	72.22	98/27/98	₽M
_EGD	(0.006	08/27/196	₽M
/ MERCURY	10,0002	09/10/98	<i>5</i> ₽
GL V PRENUN	0.0T	<i>08/27/198</i>	.©M
177	0.103	08/27/95	<i>□(h)</i>
SELENTL.1	19.52 5	<i>08/27.</i> 199	<i>,</i> ⊐M
SILVER	194 SIDB	08/27/98	⊃M
HANADIUM	7. <i>13</i>	0 <i>8/27.</i> 196	₽M
IINO	24.1	09705708	₽M

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Syzanne Howell, Laboratory Manager







104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES
ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO 83204

DATE COLLECTED: 08/09/96

TIME COLLECTED: 5:45

DATE RECEIVED: 08/14/96 DATE REPORTED: 09/06/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-10 DRYWELL CONTENTS @ 10'/ 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11849

Percent Moisture = 13.9%

ANALYSIS RESULTS (mg/kg)

RESULTS (mg/kg)

dry wt.

2.37

CYANIDE, TOTAL

NITRATE as N TOTAL PHOSPHOSUS as P 2.04

<10.0

13.280.0

wet wt.

<12.0

15,400.0

pH (SU)- - - : 11.60

deanne Howell, Laboratory Manager



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LABORATORY REPORT

REEVE AND ASSOCIATES

ATTENTION: JERRY REEVE

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/10/96

TIME COLLECTED - - -11:30

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-11 SEPTIC TANK @ 12'/ TCLP / SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11862

Results reported unless noted: (Chemistry Analysis as mg/1) (Bacteria as organisms/100 ml)

<i>ANALYSIS</i>	RESULTS	DATE ANALYZED	ANAL YST
ARSENIC	10. 01 5	· 08/27/196	FM
CADMIUM	<u>∿ ⊘≞∃9</u>	98/27/96	FM.
CHROMIUM	9. 1 <i>5</i> 8	19/27/96	FM
COPPER	10. OB	<i>)8/27/98</i>	. <i>₽M</i>
LEAD	0.011	08/27/96	₽M
MERCURY	10,000 <u>0</u>	09/10/96	5Q
MOLYBDEMUM	0.20	08/27/96	₽M
MICKEL	9 <u>152</u>	09/27/06	[=iM
CELENIUM	n mar an an an an an an an an an an an an an	98/27/96	First
2125	0,008	03/27/95	FM
MANADIUM	् <u>र</u> हुन	98/27/96	FM .
IIND	£.20	13/27/196	PM

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ME ann a

Howell. Laboratory Manager







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Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE 147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/10/96

TIME COLLECTED: 11:30 DATE RECEIVED: 08/14/96

DATE REPORTED: 09/06/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-11 SEPTIC TANK @ 12'/ 609 TESCO SITE / SLUDGE

LAB SAMPLE NUMBER - 11850

Percent Moisture = 39.0%

ANALYSIS

RESULTS (mg/kg) wet wt.

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL

NITRATE as N TOTAL PHOSPHOSUS as P 8.93

<2.0 25, 250.0

<3.28

41,400.0

14.6

Laboratory



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LABORATORY REPORT

REEVE AND ASSOCIATES 147 S. ARTHUR POCATELLO, IDAHO

ATTENTION: JERRY REEVE

83204

DATE COLLECTED - - - 08/10/95

TIME COLLECTED - - -12:30

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-12 DRAINFIELD @ 10'/ TCLP / SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11863

Results reported unless noted: (Chemistry Analysis as mo/1) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ARSENIC	(0.015	08/27/96	FM
CADMIUM	<i>0. 0284</i>	08/27/96	FM
CHROMIUM	o. 008	<i>08/27/96</i>	FM
COPPER	(0.03	08/27/96	FM.
) LEAD	(0.006	08/27/96	₽M.
MERCURY	(0. 000Z	09/10/96	ទធ
MOLYBDENUM -	(0.03	08/27/96	FM
NICKEL	.). 009	08/27/96	F'M
DELENIUM	(0.015	08/27/96	FIM
BILVER "	10. 00 <u>8</u>	08/27/96	<i>[1</i> 1
VANADIUM	(o. o3	08/27/96	- FM
IINC	0.177	08/27/96	FM

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zanne Howell, Laboratory Manager





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REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/10/96

TIME COLLECTED: 12:30

DATE RECEIVED: 08/14/96

DATE REPORTED: 08/29/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-12 DRAINFIELD @ 10' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11851

Percent Moisture =

ANALYSIS

RESULTS (mg/kg) wet wt.

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL

NITRATE as N

<1.00

8.25

8.04

<1.03

TOTAL PHOSPHOSUS as P

167.0

171.0

pH (SU) - - - : 8.70

Laboratory Manager







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REPORT LABORATORY

REEVE AND ASSOCIATES 147 S. ARTHUR POCATELLO, IDAHO

ATTENTION: JERRY REEVE

83204

TIME COLLECTED - - -12:50

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-13 DRAINFIELD @ 15'/ TCLP / SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11864

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 al)

ANALYSIS	PESULTS	DATE ANALYZED	ANALYST
ARSENIC	(0.015	08/20/96	₽M
DADMILM	0,0 913	02/20/95	PM
<i>CHROMILM</i>	o. coe	08/20/95	PM
)DBPPER	√0×05	0 8 /20/98	₽'M
~_EAD	0.006	08/20/?6	₽M
WERCURY	.j.,j.j.	CONTONES	3₽
MOLY BDENLY	(9. CZ	<i>08/20/96</i>	PM
VICKEL	17 () () () () () () () () () (09/20/96	F/M
SELENIN'''	10.015	08/20/98	FM
SILVER	9.098	03/20/95	FM
VANADILM	(O) (C)	<i>)8/20/96</i>	FM
JUND	0. 5 5 0	<i>08/20/95</i>	₽M.

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anne Howell, Laboratery Manager



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LABORATORY REPORT

REEVE & ASSOCIATES
ATTN: JERRY REEVE
147 S. ARTHUR
POCATELLO, IDAHO 83204

DATE COLLECTED: 08/10/96 TIME COLLECTED: 12:50 DATE RECEIVED: 08/14/96 DATE REPORTED: 08/29/96 SUBMITTED: JEFF TREASURE

SOURCE: 609-13 DRAINFIELD @ 15' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11852

Percent Moisture = 3.1%

ANALYSIS RESULTS (mg/kg) RESULTS (mg/kg) wet wt. dry wt.

 CYANIDE, TOTAL
 0.30
 0.31

 NITRATE as N
 1.92
 1.98

 TOTAL PHOSPHOSUS as P
 241.0
 249.0

рН (SU)- - - : 8.50

Suzanne Howell, Laboratory Manager



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LABORATORY REPORT

REEVE AND ASSOCIATES 147 S. ARTHUR POCATELLO, IDAHO

ATTENTION: JERRY REEVE

93204

DATE COLLECTED - - -08/12/96

TIME COLLECTED - - -4:00

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-14 SURFACE POND @ 5'/ TCLP / SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11865

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	CATE ANALYIED	ANALYST
ARSENIC	· (0.015	08/27.196	PM
CADMILM	. ೧೦ <u>૩</u> ૭	0 <i>9/27/04</i>	- ₽M
CHROMIUM	(0.00s	08/27/98	₽M
COPPER	(O. OI	08/27/95	PM
) LEAD	(0.00s	08/27/98	<i>=</i> 1M
MERDURY	:01 000E	09/10/06	3₽
MOLYBDENUM	<i>ು. ೦ತ</i>	oexanxos	FIM
NICKEL	. 0. 009	0e/27/9s	PM
<i>SELENIUM</i>	O.015	08/27/96	=M
CILVER	0.005	08/27/96	,=iM
('ANADILM	<i>ು. o.</i> :	09/27/96	<i>='\r\</i>
IINC	04 011	0 3 /27/83	₽M =

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Suzanne

Howell. Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO 83204

DATE COLLECTED: 08/12/96

TIME COLLECTED: 4:00

DATE RECEIVED: 08/14/96

DATE REPORTED: 08/29/96 SUBMITTED: JEFF TREASURE

SOURCE: 609-14 SURFACE POND @ 5' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11853

Percent Moisture = 7.6%

ANALYSIS RESULTS (mg/kg)

vet vt.

RESULTS (mg/kg)

dry wt.

CYANIDE. TOTAL

NITRATE as N

TOTAL PHOSPHOSUS as P

1.11

<1.00

334.0

<1.08

361.0

1.20

pH (SU) - - - - : 9.10

Laboratory Manager



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LABORATORY REPORT

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ATTENTION: JERRY REEVE

83204

DATE COLLECTED - - - 08/12/96

TIME COLLECTED - - -3:55

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-15 NORTH FLOOR DRAIN @ 3/4' / TCLP / SOIL

LAB SAMPLE NUMBER - 11866

Results reported unless noted: (Chemistry Analysis as mo/1) (Bacteria as organisas/100 sl)

ANALYSIS	RESULTS	DATE ANALYIED	ANALYST
ARSENIC	2,104	09/05/96	FM
CADMIUM		00/0 5/96	₽M
CHROMIUM	0.100	0970 5 796	Fin1
COPPER	3 3. E	<i>09/05/96</i>	₽M
) LEAD	<i>○. 409</i>	09/0 5 /96	FIM
MERCURY	0, 2002	09/10/96	${\it SQ}$
MOLYBDENUM	o. o s	09/05/96	₽M
MICKEL	7 <u>. 29</u> 1	09/05/96	<i>5</i> 71
BELENIUM	i, c <u>ee</u>	09/05/96	EIM
TIL VER	% <u>2</u> 24	09/05/95	₽M
PANADIUM .	2.42	09/05/96	Fir1
CINE	47 9. 0	09.105/196	FM

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Azamne Howell. Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO 83204

DATE COLLECTED: 08/12/96

TIME COLLECTED: 3:55

DATE RECEIVED: 08/14/96

DATE REPORTED: 09/06/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-15 NORTH FLOOR DRAIN @ 3/4' / 609 TESCO SITE / SLUDGE

LAB SAMPLE NUMBER - 11854

Percent Moisture = 48.7%

ANALYSIS

RESULTS (mg/kg) vet vt.

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL

NITRATE as N TOTAL PHOSPHOSUS as P 2.940.0 <2.00

5,730.0

<3.90

34,590.0

67.400.0

 $\rho H (SU) - - - : 7.50$

Howell, Laboratory Manager



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Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE AND ASSOCIATES
147 S. ARTHUR
POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/12/96

TIME COLLECTED - - -4:35

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/12/96

ATTENTION: JERRY REEVE

SUBMITTED : JEFF TREASURE

SOURCE -: 609-16 INTERCEPTOR OUTLET @ 5'/ TCLP/ SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11867

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ARSENIC 0.130 09/12/96 F	PM
CADMIUM 61.8 09/05/96 A	M
CHROMIUM 0.079 09/12/96 F	M
<u>COPPER 65.5 09/05/96</u> A	int.
\LEAD 5.81 09/12/96 H	ing.
JMERCURY 0.0008 . 09/10/96 S	हा <i>द</i>
MOLYBDENUM 0.13 09/12/96 H	<i>ו</i> יוי
NICKEL 0.292 09/12/96 A	M
SELENIUM (0.015 09/12/96 A	111
- BILVER 0.159 09/12/96 A	int.
VANADIUM 0.77 09/12/96 /	M
ZINC 515.0 09/05/96	M

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ntanne Howell, Laboratory Manager







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147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/12/96

TIME COLLECTED: 4:35

DATE RECEIVED: 08/14/96

00/14/36

DATE REPORTED: 09/06/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-16 INTERCEPTOR OUTLET @ 5' / 609 TESCO SITE / SLUDGE

LAB SAMPLE NUMBER - 11855

Percent Moisture = 66.7%

ANALYSIS

RESULTS (mg/kg) wet wt.

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL

NITRATE as N

TOTAL PHOSPHOSUS as P

23,900.0

<2.00

16,240.0

71,700.0

<6.01

48.800.0

pH (SU) - - - : 6.70

uzanne Howell, Laboratory Manager



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LABORATORY REPORT

REEVE AND ASSOCIATES
147 S. ARTHUR
POCATELLO, IDAHO

ATTENTION: JERRY REEVE

83204

TIME COLLECTED - - -1:45

DATE RECEIVED - - - 08/14/96

DATE REPORTED - - - 09/11/96

SUBMITTED : JEFF TREASURE

SOURCE -: 609-17 LOADING PIT @ 2.5'/ TCLP/ SOIL/ TESCO SITE

LAB SAMPLE NUMBER - 11868

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYIED	<i>ANALYST</i>
ARSENIC	(0.015	08/27/96	⊆M
CADMIUM	0.754	08/27/96	₽M
CHROMIUM	(0.006	08/27/96	₽ M
COPPER	<i>(0.03</i>	08/27/96	□/M
\ LEAD	(0.006	08/27/96	FM
) MERCURY	(0.0002	09/10/96	<i>⊴ର</i>
MOLYEDENLIM	⟨ ೧. 0 3	08/27/96	FM1
NICKEL	9.02\$	08/27/95	'7M
SELENIUM	(C. 915	08/27/96	FM
SILVER	:0.005	08/27/99	₽M
VANADIUM .	(0 . 03	08/27/96	F/M
IINC	3. 4 %.€	09/05/00	.≅M

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fanne Howell, Laboratory Manager





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Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 08/13/96

TIME COLLECTED: 1:45

DATE RECEIVED: 08/14/96

DATE REPORTED: 09/06/96

SUBMITTED: JEFF TREASURE

SOURCE: 609-17 LOADING PIT @ 2.5' / 609 TESCO SITE / SOIL

LAB SAMPLE NUMBER - 11856

Percent Moisture = 5.1%

ANALYSIS

RESULTS (mg/kg)

RESULTS (mg/kg)

dry wt.

CYANIDE, TOTAL

NITRATE as N

0.30 1.83

0.32

1.93

TOTAL PHOSPHOSUS as P

4680.0

4930.0

pH (SU)- - - - : 5.80

Howell, Laboratory Manager



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LABORATORY REPORT

REEVE AND ASSOCIATES 147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - -08/14/96

TIME COLLECTED - - -3:30

DATE RECEIVED - - - 08/15/96

DATE REPORTED - - - 08/29/96

SUBMITTED : JEFF TREASURE

ATTENTION: JERRY REEVE

SOURCE -: #609-18 WELL WATER / TESCO - 609

LAB SAMPLE NUMBER - 11915

Results reported unless noted: (Chemistry Analysis as mg/1) (Bacteria as organisms/100 ml)

, RESULTS	DATE ANALYZED	ANAL,YST
143.0	08/22/96	IM
o. 005	08/20/96	FM
0.0005	08/20/96	FIM
ಚರ್ಚವ	08/27/96	MB
o. 00s	08/21/96	SQ
0.67	08/22/96	JD
o. 53	08/15/96	MB
(0.005	<i>08/20/95</i>	₽M
29. 2	08/22/96	SQ
4 5. 3	08/27/96	MB
<i>∴. ∪⊇</i>	08/20/96	JD
T) 45	<i>08/15/9</i> 5	SC
	143.0 0.005 0.005 10.0 0.008 0.67 0.58 10.005 20.5	143.0 08/22/96 0.005 08/20/96 00.0005 08/20/96 10.0 08/27/96 0.006 08/21/96 0.67 08/22/96 0.53 08/15/96 00.005 08/20/98 20.5 08/22/98 20.5 08/22/98

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dzanne Howell, Laboratory Manager





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Water, Waste Water and Soil Analysis

REPORT LABORATORY

REEVE AND ASSOCIATES

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED - - - 08/14/96

TIME COLLECTED - - -3:30

DATE RECEIVED - - - 08/15/96

DATE REPORTED - - - 09/09/96

ATTENTION: JERRY REEVE

SUBMITTED : JEFF TREASURE

SOURCE -: #609-19 INTERCEPTOR LIQUID / TESCO - 609

LAB SAMPLE NUMBER - 11916

Results reported unless noted: (Chemistry Analysis as ag/1) (Bacteria as organisms/100 ml/

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
<i>ALKALINITY</i>	09.0	09/32/95	
ARSENIC	ು ಅವಕ	08/29/9 6	±'M
CADMIUM	21. T	08/29/96	/='/ >
<i>KOHLORIDE</i>	1340.0	09.10473\$	MB
)CYANIDE. TOTAL	25.9	08 (21/96	SQ
'FLUORIDE		097087 9 8	$\circ JD$
MITRATE as M		19871 5 798	MB
SELEMIUM	0,000	08/29/96	₽M
GODIUM	THE TIPS AND THE STATE OF THE S	08/28/98 [*]	SO
<i>EULFATE</i>	జ≆త్తిలు. ల	09/04/98	MB
TOTAL SHOSPHORUS AS T	in the second se	08/00/196	JD
pH SUX	五. こう	08/15/96	GC

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Howell. Laboratory Manager

Address

REEVE & ASSOCIATES
JERRY K. REEVE PE.
147 S. ARTHUR AVE.
POCATELLO, ID 83204



Alchem Laborarones, Inc.

104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172

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104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO. IDAHO

DATE COLLECTED: 07/30/96

TIME COLLECTED: 13:30

DATE RECEIVED: 07/31/96

DATE REPORTED: 08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: B2 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11205

Percent Moisture = 19.2%

ANALYSIS

RESULTS (mg/kg) wet wt.

RESULTS (mg/kg)

dry wt.

ADMIUM

440.0

545.0

80.0

99.0

Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

DATE COLLECTED: 07/30/96

TIME COLLECTED:

DATE RECEIVED: 07/31/96

DATE REPORTED:

08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: A10 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11206

Percent Moisture = 19.4%

ANALYSIS

RESULTS (mg/kg)

wet wt.

RESULTS (mg/kg)

dry wt.

CADMIUM

ZINC

982.0

18,400.0

1,220.0

22,900.0

Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

10 83204

DATE COLLECTED: 07/30/96

TIME COLLECTED:

DATE RECEIVED:

07/31/96

DATE REPORTED: 08

08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: B18 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11207

Percent Moisture = 20.6%

ANALYSIS

RESULTS (mg/kg)

wet wt.

RESULTS (mg/kg)

dry wt.

CADMIUM

564.0

7,060.0

710.0

8,890.0

Mizanne Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

DATE COLLECTED: 07/30/96

ATTN: JERRY REEVE 147 S. ARTHUR

TIME COLLECTED: DATE RECEIVED:

07/31/96

POCATELLO, IDAHO

83204

DATE REPORTED: 08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: D4 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11208

Percent Moisture = 13.5%

ANALYSIS

RESULTS (mg/kg)

RESULTS (mg/kg)

dry wt.

MUIMGA:

870.0 3,520.0

vet wt.

1,010.0

4,070.0

Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO 83204

DATE COLLECTED: 07/30/96

TIME COLLECTED:

DATE RECEIVED: 07/31/96

DATE REPORTED:

08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: C11 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11209

Percent Moisture = 16.1%

ANALYSIS

RESULTS (mg/kg)

wet wt.

RESULTS (mg/kg)

dry wt.

CADMIUM

1.38

61.0

1.64

72.7

anne Hovell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR POCATELLO, IDAHO

83204

DATE COLLECTED: 07/30/96

TIME COLLECTED: DATE RECEIVED:

07/31/96

DATE REPORTED:

08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: D15 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11210

ANALYSIS

RESULTS (mg/kg) vet wt.

RESULTS (mg/kg)

dry wt.

CADMIUM

1.94

2.29

Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

. Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES

ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

83204

DATE COLLECTED: 07/30/96

TIME COLLECTED:

DATE RECEIVED: 07/31/96

DATE REPORTED: 08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: H17 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11211

Percent Moisture = 16.6%

ANALYSIS

RESULTS (mg/kg)

RESULTS (mg/kg)

wet wt.

dry wt.

MUINDAC CINC

214.0

257.0

1,040.0

1,240.0

Howell, Laboratory Manager



104 West 31st Street Boise, Idaho 83714

Phone (208) 336-1172 FAX (208) 336-7124

Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

DATE COLLECTED: 07/30/96

TIME COLLECTED:

DATE RECEIVED: 07/31/96

DATE REPORTED: 08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: H8 AEI SITE / FORMER AEI SITE

LAB SAMPLE NUMBER - 11212

Percent Moisture = 15.2%

ANALYSIS

RESULTS (mg/kg)

wet wt.

RESULTS (mg/kg)

dry wt.

CADMIUM

504.0

430.0

594.0

507.0

Laboratory Manager



104 West 31st Street Boise, Idaho 83714 Phone (208) 336-1172 FAX (208) 336-7124 Water, Waste Water and Soil Analysis

LABORATORY REPORT

REEVE & ASSOCIATES ATTN: JERRY REEVE

147 S. ARTHUR

POCATELLO, IDAHO

RTHUR

DATE COLLECTED: 07/30/96

TIME COLLECTED: 4:30

DATE RECEIVED: 07/31/96

DATE REPORTED: 08/12/96

SUBMITTED: JEFF TREASURE

SOURCE: M2 AEI SITE / FORMER AEI SITE

83204

LAB SAMPLE NUMBER - 11213

Percent Moisture = 18.5%

ANALYSIS

RESULTS (mg/kg)

vet vt.

RESULTS (mg/kg)

dry wt.

CADMIUM

INC

24.4

346.0

29.9

425.0

Zanne Howell, Laboratory Manager

APPENDIX E REFERENCE SOURCES OF INFORMATION

Literature Sources:

EnviroSearch International, <u>Phase One Environmental</u>
<u>Assessment Report, Former A.E.I. Corporation Facility...</u>
November 7, 1995.

- U.S. EPA / Michael Silverman, <u>Compliance Evaluation</u> <u>Inspection Report - A.E.I. Corp.</u>, 07/02/91.
- U.S. EPA Drinking Water Programs Branch / Craig Paulsen, Underground Injection Control Program Inspection Report, 07/02/91.
- U.S. EPA Office of Waste Programs Enforcement / PRC Environmental Management, Inc., <u>Draft Preliminary</u> Assessment A.E.I. Inc., 10/29/93.

Bechtel Environmental, Inc., <u>Preliminary Site</u> <u>Characterization Summary</u>, Volumes 1 and 4, January 1994

U. S. EPA Superfund Program, <u>CIRCLIS Site/Event Listing</u>, 04/10/95.

IDEQ, <u>List of Registered USTs in Idaho</u>, 10/18/96.

IDEQ, <u>List of Leaking Underground Storage Tanks</u>, 01/24/96.

IDEQ, <u>Power-Bannock Counties Particulate Matter (PM-10)</u>
<u>Air Quality Improvement Plan</u>, 1993. (Under revision)

Idaho Department of Health and Welfare - <u>Administrative</u>
Rules - Water <u>Ouality</u> and <u>Wastewater Treatment</u>, <u>IDAPA</u>
16.01.02, July 1993 Updated to April 1996. Requirements".

EPA, <u>National Ambient Air Ouality Standards</u>, 40 CFR part 50.

EPA, Non-attainment Areas for NAAOS Pollutants, (PM-10), September 1993)

USGS and City of Pocatello, Aerial Photographs, 1971, 1981.

Site Operations Sources:

Bill Brugger, President, Tesco American Inc., 1925 W. Indiana Ave., Salt Lake City, UT 84126, Tel: 801-973-9400.

Glade Fifield, Formerly with Williamsen Trucking, 1045 Malibu, Pocatello, Idaho, 237-2030.

APPENDIX 15

US EPA Site Documents

Inspection Report

for

AEI Corporation
Class V Injection Well Inventory
Pocatello, Idaho

Prepared by:

Craig Paulsen

Drinking Water Programs Branch U.S. Environmental Protection Age

Region 10

Date: <u>July 3, 1991</u>

TABLE OF CONTENTS

Inspection Site 1
Inspectors 1
Date of Inspection 1
Purpose of Inspection 1
Introduction 1
Inspection x
EPA Sample Results x
APPENDICES
A EPA Notice of Inspection
B AEI Warrant and Affidavit
C EPA Quality Assurance Project Plan
D NET Laboratory Results
C EPA Laboratory Results
D Photographs and Field Notes

US ENVIRONMENTAL PROTECTION AGENCY

UNDERGROUND INJECTION CONTROL PROGRAM INSPECTION REPORT

Inspection Site:

Inspectors:

AEI Corporation 1297 E. County Road Pocatello, Idaho 83202 (208)234-7171

.

Craig Paulsen, Drinking Water Programs Branch, EPA Region 10 Russ Baker, Metcalf & Eddy, Inc.
Mike Silverman, EPA Region 10, IOO

Owner:

Allan Elias

Date of Inspection:

July 2, 1991

Type of Inspection:

This inspection was conducted as part of a Region 10 effort to inventory injection wells on Indian Lands for the Underground Injection Control (UIC) Program under the Safe Drinking Water Act (SDWA), and to sample injection wells that are identified in the survey that could be injecting contaminated fluids into the groundwater.

Introduction

The Environmental Protection Agency (EPA) implements the Underground Injection Control Program under the Safe Drinking Water Act on Indian Lands. Region 10 has collected injection well inventory information on such wells on Indian Lands since 1988. For FY91, the consulting firm, Metcalf & Eddy, Inc., is EPA's UIC contractor under Contract No. 68-C0-0020. The relevant Work Assignment, No. 0-10-3, directs the contractor to inventory injection wells on the Colville, Yakima and Fort Hall Indian Reservations. During the week of May 6-9, Russ Baker, a geologist with Metcalf & Eddy, Inc., and I searched for and inventoried all accessible injection wells found on the Ft. Hall Indian Reservation.

AEI Corporation lies within the SW 1/4 or the SW 1/4 of Section 12, and the NW 1/4 or the NW 1/4 of Section 13, Township 6 South, Range 33 E.B.M., Power County, Idaho. The AEI Corporation was determined by map reference to lie within the external boundaries of the Ft. Hall Indian Reservation and unsuccessful attempts were made on May 7 and May 8 to inspect this property for possible injection wells.

AEI Corporation is a small firm owned and operated by Allan Elias at the above referenced address. The site is a converted farm implement retail outlet. At this site, AEI processes various stack gas precipitates and other byproducts from phosphate manufacturing operations. Until recently, we were told, AEI purchased this material from the nearby FMC Corporation facility, although we were subsequently informed by FMC personnel that FMC no longer supplies AEI. AEI uses a heat process to remove the carbon content from this material followed by an acidification process to extract phosphate fertilizer and various heavy metals from these materials for resale.

Because of the potentially hazardous nature of stack gas precipitates and slag byproducts, EPA was concerned about what measures are taken to prevent their release into the environment. Since AEI is located beyond known municipal sewer facilities, EPA is concerned about how AEI contains these materials and prevents their access to groundwater. Earlier discussions with the Shoshone-Bannock Tribe suggested that AEI was equipped with a septic system.

Inspection

On July 2, Mike Silverman (IOO), Russ Baker (M&E) and I met US Marshall Larry Hunt at the Quality Inn in Pocatello at 0800 hrs. Silverman gave Hunt the warrant issued by the US Magistrate in Boise, which he had brought to Pocatello with him. Hunt then followed us in his vehicle to the AEI facility. At 0815 hrs Hunt served the warrant to John von Schultz, an employee of AEI, and Silverman and I showed von Schultz our inspector's credentials. I explained that Baker and I were there to inspect the facility under Section 1445 of the Safe Drinking Water Act and tried to give von Schultz the Notice of Inspection.

Von Schultz explained that Allan Elias, owner of AEI, was out of town and asked us to come back later. Hunt told von Schultz that we were at AEI under authority of the warrant and directed the inspection team to proceed over the objections of von Schultz. Von Schultz then placed a call to Elias to inform him of our presence.

At this point the inspection team began its survey of the facility to locate UIC facilities. Inside the building, three covered floor drains were located as shown on the floor plan supplied earlier by Elias after the first visits. The floor drains measured 21 inches square and were covered with perforated steel plates. Using a flashlight we could see liquid in the center drain. The other two drain covers were partially covered by large steel tanks (approximately 10-12 feet in diameter by about 12 feet high) and were not accessible. According to the floor plan, all three drains are connected and flow to a dry well outside the building.

The steel tank partially covering the northernmost floor drain was labeled "cyanide" and there appeared to be small leak stains at the bottom of the tank over the floor drain. No liquid was visible through the drain cover at this drain.

A perforated steel manhole cover over a dry well was located in about the center of the paved area on the west side of the building. This dry well was about midway along the west wall of the building and about 75 feet west of the building. The paved area on this side of the building sloped towards the dry well from North, South, East and West perimeters of the paved area on the west side of the building. There was a muddy area next to the dry well where moisture and sediment accumulated from surface runoff.

There were several piles of material on this paved area to the west, south and north of the dry well. Von Schultz told me that these piles were various types of "ores" and "treater dusts" and were either material to be processed by AEI or byproducts from this processing. These piles were 2 to 6 feet in height and 10 to 40 feet in diameter. One pile was yellowish in color and was identified by von Schultz as a sulfur material. Another pile was black in color and was identified by von Schultz as material scrapings collected from around the site and piled there. A third pile was the largest and contained a mixture of black, as well as reddish brown material, although von Schultz said it was basically the same type of material. A fourth black colored pile was only about 2 feet in height and had a water sprinkler placed on top, although the sprinkler was not operating.

There was no containment structure for these piles of material excepting the slight pavement gradient towards the central dry well. Small patches of these materials were scattered about on the paved area with a 5-foot patch of this material next to the dry well in the lowest part of the paved area. I observed that surface runoff on this paved area would probably flow towards the dry well from any direction.

At 0830 hrs Elias telephoned the AEI facility to ask about our presence and what we intended to do there. Elias was aware of the warrant at this time. I explained to him about EPA's UIC inventory efforts on the Reservation and our intention to take samples of materials that might be getting into the groundwater. Upon hearing about the sampling and possible review of plant records, Elias said he would come to AEI immediately, that he could be there in about an hour. We continued our inspection during this period, although Baker had to leave the site to collect some analyzing gases for instrument calibration that were late in arriving from the M&E laboratory, leaving Silverman and me at the site.

The AEI building is located on the southern half of a property bounded by cyclone fercing. The northern half to the Interstate 15 right of way is mostly open field with some low and

patchy vegetation. Equipment including rusty hoppers and electric motors, were scattered about on the east and west sides of this unpaved area. This area appeared to be little used. I found no injection wells in this area.

Near the southeast corner of the fenced property is located a well head with steel protection posts to prevent vehicles from hitting it. A covered trench line ran from this well head to the building where a 1-inch diameter PVC pipe rose above ground and entered the building through a hole in the wall. I was told by Silverman that this was a water supply to AEI. I found no dry wells or drains on the eastern side of the building. This area is paved and contained only a single pile of brownish material about 8 feet high in the northeast corner of the pavement.

The AEI building is constructed of concrete block and is furnished with multiple metal roll-up doorways along both the east and west sides for large vehicle or equipment access. At several points along these and the north walls, hopper and conveyor belts were installed. These are used to bring the ores and precipitator dusts into the building for processing according to von Schultz.

Von Schultz told me that AEI had not operated since a May 7, 1991 stack test, as well as for some time before that. He said that the nearby FMC Corporation was not willing to sell AEI its precipitator dust for processing.

I asked von Schultz if there were any additional floor drains or dry wells not shown on the floor plans. He said "no". I asked him about the drain field shown on the plans that received sanitary wastes from the restroom/locker room at AEI, and possibly a room used as a laboratory facility. He said he knew nothing about this drain line or drain field.

At 0930 I walked the fence line around the AEI facility looking for injection well facilities or signs of injection activity. A filled irrigation canal, the surface of which was about 1-2 feet above grade, lies immediately outside the west fence line. Interstate 15 borders the northern fence line and E. County Road borders the south fence line.

Inside the AEI building are about 4 upright tanks of 8-12 feet in diameter and 8 to 12 feet high. There are also two large horizontal dryers and a calcinor, each about 8 feet in diameter and 30 feet long. There is also one open railroad freight car, which von Schultz told me was previously used as a leach tank for the ore. All of this machinery and equipment appeared to be old, corroded and very dirty. The floor was also very dirty with material similar to that found in the material piles outside. Lighting was very poor and there were machine parts scattered on the floor throughout the processing area.

A front-end loader was parked in one of the bays in this area and oil covered the floor underneath this machine. This was about 3 feet from one of the floor drains. No oily sheen was noted on the water surface in the drain.

A schematic drawing of the AEI building and surrounding paved areas is on page 6 of my field notebook. This sketch shows relative placement of major equipment pieces in the building, the floor drains, dry well and material piles.

At 1105 hrs Baker had returned with the photoionizer detector (PID) calibration gases. He inserted the PID probe into perforations of the 3 floor drains and the dry well outside. In the center floor drain he got a peak reading of 27, using isobutylene gas as a standard. Elias arrived and requested split samples of everything we took. We agreed to this request.

The floor drain cover and the dry well cover were badly corroded and required use of a steel bar and sledgehammer to open them. By 1155 hrs the center floor drain was uncovered and we observed liquid with a surface scum in this drain. According to the floor plan this liquid was the first chamber of an oil-water separator.

I used hardhat, eye protection and latex gloves for sampling activities. I used a phydrion Paper (scale 1-12) to test for ph and got a 6.5 reading on the liquid in this floor drain. A photographic record was made of this sampling activity.

Baker and I completed labeling the empty sample containers by 1215 hrs and began sampling the liquid in the center floor drain. Samples were taken according to the QAPP with identical splits for Elias. Samples were taken using a stainless steel bomb sampler of about 500 ml capacity. The sampler and all sampling equipment was first decontaminated according to the QAPP, as well as between each different sample. Sampling of the floor drain was completed at 1245 hrs.

At 1300 hrs we opened the dry well cover and used a flashlight to observe the interior. The dry well was about 11 feet deep and about 4 feet in diameter. The basin of the dry well was constructed of offset 8 x 8 x 16 inch concrete blocks with no mortar. A single concrete pipe of about 8-10 inch diameter entered the dry well chamber about 5 feet below grade. There was no liquid in the dry well and the bottom material appeared to be soil and construction debris. No visible sediment deposits were seen. A strong smell of acid was noted in this dry well.

At 1330 hrs Elias identified the piles of material on the paved area near the dry well as "soft rock phosphate ore" (black and reddish brown piles), while the yellowish pile contained a sulfur ore.



At 1345 Baker and I took a sediment sample from the muddy area adjacent to the dry well cover. By 1430 hrs we had also taken sediment samples from the black and reddish brown material piles in this area for analyses. We used a newly purchased steel shovel to take these samples and decontaminated the shovel before, between and after each of these samples according to the QAPP.

Two 24-exposure rolls of film were used to document decontamination procedures, sampling activities and features of the AEI facilities. A log was kept of all film exposures to identify specific features and activities. Photographs were taken to show floor drains and equipment/machinery inside the building. General housekeeping and maintenance of AEI were also documented, including condition of the machinery and proximity to the floor drain system.

Around 1430 hrs a full roll of film was used to document site features and equipment outside the building. The opening to the dry well and juxtaposition of nearby materials piles were photographed. Photos were also taken from the dry well opening into the dry well chamber to show construction and condition of the dry well.

At 1445 Baker and I held a final interview with Mr. Elias in his AEI office. At that time I collected a signed copy of the Notice of Inspection from Elias and Baker prepared two hand-written Inventory Receipts for the sediment and fluid samples taken from the AEI facility in Mr. Elias' presence. I reviewed these receipts for accuracy and gave Mr. Elias his choice of either copy.

In addition, we left split samples of all of our samples in the foyer of the building at Mr. Elias' direction. During our sampling, we kept all samples in an ice chest with ice. The sample splits that we left for Mr. Elias were left on a counter top without ice or other cooling measures. We did explain to Mr. Elias that some of the samples had a limited shelf life before they lost their validity.

During the final interview, Mr. Elias asked when we would return to AEI. I replied that our future activities with regard to AEI would probably be determined by the sample analyses results.

We left AEI at 1500 hrs after policing up our sample equipment and replacing the floor drain and dry well covers. All sampling equipment was decontaminated a final time according to the QAPP. Mike Silverman left for his Boise office.

By 1700 hrs we had finished packing all of the AEI samples with cubed ice in an ice chest for shipment to the M&E laboratory. A Chain of Custody form was completed and included in this ice chest. The ice chest containing the AEI samples was

delivered to the Pocatello Federal Express office at 1700 hrs for delivery to the laboratory by 1030 hrs the following day.

At 1730 hrs I tried to telephone Marshall Hunt to return the warrant. Hunt had left the AEI facility about 0900 hrs after determining that AEI was cooperating with the warrant and inspection. Hunt's instructions to me included completion of the Inventory Receipt and return of the warrant and receipt to him upon completion of the inspection. I was not able to reach Hun through either his FTS or beeper numbers (FTS 328-1070, (208)236-9121) so I left a message on a recorder at his beeper number that we had completed the inspection and that I would leave the warrant and receipt at the hotel desk where he had met us earlier that morning. I photocopied the Inventory Receipt for EPA records and retained a copy of the warrant.

I took Baker to the Pocatello airport at 1830 for his flight home and returned to the my hotel.

Hunt had not called or collected the warrant and receipt by late evening on July 2, so I took it to his office in the Pocatello Federal Building at 0800 hrs July 3. Hunt was not in his office sc I left it for him with his secretary after explaining what it was. I also left my name and EPA office telephone number in case Hunt had any further question.

At 0930 hrs I delivered the last of our sampling equipment to the Pocatello Federal Express office for return to M&E. Following this I returned to Seattle.

EPA Sampling Results

Samples from the identified material piles located on the tarmac area around the AEI building, and fluid samples from the identified floor drain, were analyzed by NET Pacific, Inc. and by EPA's Manchester, Washington laboratory. Both laboratories are certified to perform these analyses.

Laboratory results are given in Attachments C and D - Lab Results. They show that the liquid in the floor drain (AEI-1-RB) contained 9.38 mg/l Cadmium, which exceeds the hazardous waste threshold under Toxic Characteristic Leaching Procedure (TCLP) of 1.0 mg Cd/l (40 CFR §262, Table II.2), as well as the Maximum Contaminant Level (MCL) of 0.01 mg Cd/l (40 CFR §141.11). In addition, MCLs for lead (0.05 mg/l), Selenium (0.01 mg/l) and silver (0.05 mg/l) were exceeded in the liquid sample taken from the floor drain.

Ore samples taken from the piles located on the tarmac west of the AEI building and upgradient from the perforated dry well cover exceeded MCLs for Arsenic (0.05 mg/l), Chromium (0.05 mg/l), and Selenium. All ore samples taken from this area exceeded MCL levels for Cadmium.

Photographs and Field Notes

A site sketch of the AEI facilities and representative annotated photographs are included in Appendix __. All photographs were taken July 3, 1991.

Reg 11 5-97

AEI Enterprises, Inc. 1297 E. County Road Pocatello, Idaho 83202 Contact: Allan Elias, Owner No. of Wells: 1 5D4 Active (208)234-7171

Inspectors: Craig Paulsen (EPA Region X)
Russ Baker (Metcalf & Eddy, Inc.)
Date of Inspection: May 7 and 8, 1991 (attempted)
July 2, 1991 (sampled)

AEI Enterprises purchases stack gas precipitate from manufacturing plants, as well as some slag materials, for extraction and resale of fertilizer chemicals and heavy metals. On May 7 and 8, 1991, the inspection team attempted to inventory the facility for possible Class V injection well activity. On both occasions, Mr. Elias (the owner/operator) denied access to the inspection team.

The inspection team had been advised by Roger Turner, Water Quality Specialist, Shoshone-Bannok Indian Tribes and Bill Broderick, Air and Toxics Officer, Shoshone-Bannok Indian Tribes that AEI Corporation might have injection wells located at the facility. The inspection team was also advised that the facility is located beyond the known limits of the City of Pocatello sewer system. Furthermore, the inspection team was advised that Mr. Elias was in the process of filing for bankruptcy and could abandon his facility.

Shortly after the inspection team returned to their respective offices, Mr. Elias sent a letter to Craig Paulsen of USEPA Region X, discussing his reasons why he denied access to the inspection team. Mr. Elias also enclosed construction plans showing the design of a dry well and three connecting floor drains.

Due to the potentially toxic nature of stack gas precipitates and slag byproducts, and the fact that Mr. Elias could abandon his facility, the inspection team returned on July 2, 1991 with a search warrant from the Boise, Idaho Federal Magistrate, to sample the AEI Corporation's injection well.

The inspection team was joined by Mike Silverman of EPA's RCRA division in Boise, Idaho.

The inspection team took one (1) fluid sample from AEI Corporation's floor drain (AEI-1-RB) and three (3) material samples: one (1) sample from sediment adjacent to the dry well which may represent fluids which were previously injected into the dry well (AEI-2-RB), one (1) sample from a material pile which was previously scraped from the tarmac near the dry well (AEI-Black Pile), and one (1) sample from an ore pile near the dry well (AEI-Red Pile).

SAMPLING METHODS:

Fluids

Sample AEI-1-RB was a fluid sample taken from fluids contained in the center floor drain. Special care was taken as to not disturb any sediments that might exist at the bottom of the floor drain.

The floor drain sample (AEI-1-RB) was taken with a precleaned stainless steel "Bomb Sampler." This Bomb Sampler is a single chambered, sealed sampler with a top and bottom valve. These valves remain closed until the sampler is slowly lowered to a discrete depth. Once the desired depth is reached, the bottom valve is remotely opened as to allow fluids from that depth to slowly enter the chamber. The design of the Bomb Sampler prevents a vacuum from being created, which might mix the bottom sediments with the fluids and therefore, only fluids can enter the chamber.

The fluids were then transferred into sample contianers which were furnished by the contract laboratory.

Material Samples

Black

Material samples AEI-2-RB, AEI-Black Pile and AEI-Red Pile were collected using a precleaned shovel. Special care was taken during sampling as to not collect any material that was exposed to the sun. The samples were collected from beneath the surface of the sampling media and transfered into 500 mL glass sample containers which were furnished by the contract laboratory.

SAMPLE RESULTS:

Sixteen (16) compounds were detected in sample AEI-1-RB. Cadmium (EPA Hazardous Waste Number D006) was detected at 9.38 mg/L. The Maximum concentration of Contaminants for the Toxicity Characteristic specified in 40 CFR §261.24 for cadmium is 1.0 mg/L. Therefore, under this stature, cadmium would classify as a Characteristic Waste. Hence, the floor drain operated at AEI Corporation can be classified as a Class IV injection well.

Eleven (11) compounds were detected in sample AEI-2-RB, ten (10) compounds were detected in sample AEI-Red Pile and eleven (11) compounds were detected in sample AEI-Black Pile. None of the compounds detected in these samples exceed the TCLP Regulatory limits.

ATTACHMENT 1 WARRANT

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF IDAHO

IN THE MATTER OF:

AEI Corporation 1297 E. County Road

Pocatello, Idaho

Civ. No. <u>M5-38/2</u>

ADMINISTRATIVE WARRANT FOR ENTRY AND INVESTIGATION

TO: Any Officer, Employee, or Designated Representative of the Administrator of the United States Environmental Protection Agency, and to Any United States Marshall:

An Application for an Administrative Warrant and Affidavit in support thereof have been filed with this Court in this cause. These documents show that there exist reasonable grounds: (1) to believe that violations of the Safe Drinking Water Act (SDWA), 42 U.S.C. §§ 300f-300j-26 and the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901-6992k have occurred; and/or (2) to determine whether or not the facility is in violation of the requirements and standards of the SDWA and RCRA at the premises described as follows:

1297 E. County Road, Pocatello, Idaho.

A portion of the SW 1/4 or the SW 1/4 of Section 12, and the NW 1/4 or the NW 1/4 of Section 13, Township 6 South, Range 33 E.B.M., Power County, Idaho, described as follows:

Beginning at the Southwest corner of said Section

ADMINISTRATIVE WARRANT FOR - Page 1 ENTRY AND INVESTIGATION

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12, thence South 0°02'49" West along the West line of said Section 13, 218.94 feet to the Northerly right-of-way of Old Highway 30; thence North 72°38'40" East along said Northerly right-of-way 470.37 feet; then North 0°09'40" East 880.61 feet to the Southerly right-of-way to Interstate 15 West; thence South 68°06'36" West along said - Southerly right-of-way 485.77 feet to the intersection of said Southerly right-of-way and the West line of said Section 12; thence South 0°02'49" West along said West line of said Section 12, 620.88 feet to the place of beginning.

And the Court, having found that reasonable grounds exist for administrative entry pursuant to Section 1445 of the SDWA, 42 U.S.C. § 300j-4, and Section 3007 of the RCRA, 42 U.S.C. § 6927, and for the issuance of an entry warrant:

IT IS HEREBY ORDERED AND COMMANDED that EPA, through its duly authorized representatives, the U.S. Marshall, or any other federal law enforcement officer, shall be, and is hereby, authorized and permitted to have entry and, as necessary, to re-enter (prior to the termination of this warrant) the facility as described hereinabove, during daylight hours, and to conduct thereon those actions authorized by Section 1445(b)(1) of the SDWA, 42 U.S.C. § 300j-4(b)(1), and Section 3007 of the RCRA, 42 U.S.C. § 6927.

The activities authorized by this warrant include:

- (A) A detailed walking and inspection of the entire facility site, including but not limited to, inspection of the facility's processes;
- (B) The taking of samples collected from any generated precipitate or sludge or any stored or

ADMINISTRATIVE WARRANT FOR - Page 2 ENTRY AND INVESTIGATION



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accumulated hazardous waste.

- (C) The taking of samples, collected at floor drains and via sample containers, from waste streams or containers that may contain waste for injection into a well or wells located at the facility or serving the facility;
- (D) The examination of records, files, and papers, processes, and controls (documents) to be found either on-site or other location necessary to determine whether AEI Corporation is in compliance with the SDWA, as well as such documents relating to hazardous wastes to determine compliance with the RCRA;
- (E) The taking of photographs of all equipment and components of the facility associated with possible injection of waste into a well or wells located at the facility, including floor drains or other containers that may contain waste for injection, as well as equipment and components relating to hazardous waste; and
- (F) Any additional activities authorized under the SDWA or RCRA, including interviews and conferences, as necessary to ascertain compliance or noncompliance with the SDWA, RCRA, and the implementing regulations.

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the premises at the time of initial entry.

IT IS FURTHER ORDERED that a copy of this Warrant be left at

IT IS FURTHER ORDERED that a brief inventory identifying any materials removed from the premises be furnished to the owner, operator or representative of the facility at the conclusion of activities pursuant to this warrant.

IT IS FURTHER ORDERED that the duration of this warrant's authorization shall be of such reasonable length to enable EPA representatives to complete satisfactorily those actions authorized by Section 1445 of the SDWA, 42 U.S.C. § 300j-4, and Section 3007 of the RCRA, 42 U.S.C. § 6927, but in no case longer than ten days from the date hereof.

IT IS FURTHER ORDERED that the United States Marshall and any federal law enforcement officer is hereby authorized to assist EPA in such manner as may be reasonably necessary and appropriate to execute this warrant and all the provisions contained herein.

IT IS FURTHER ORDERED that a prompt return of this warrant and any inventory shall be made to this Court within twenty (20) days from the date hereof, showing that the warrant has been

executed and that the entry has been completed within the time specified above.

> United States District Judge/ Magistrate

District of Idaho

ADMINISTRATIVE WARRANT FOR - Page 5 ENTRY AND INVESTIGATION

DATED this

RETURN

The activities described in this Warrant were completed on , 1991.

ADMINISTRATIVE WARRANT FOR -

28 ENTRY AND INVESTIGATION

I hereby co	ertify that a	copy of the	e within Wa	rrant	was
served by presen	nting a copy	of the same	to		, an
agent of	·	on July _	, 1991,	in	
	_, Idaho.		1		
					•
·	-				
	•				:

ADMINISTRATIVE WARRANT FOR - Page 6 ENTRY AND INVESTIGATION

INVENTORY OF PROPERTY RECEIVED PURSUANT TO WARRANT

While conducting the response action at the AEI Corporation
site on, 1991, I,
Russ Buller , seized certain property.
The following is an inventory of the property seized. One Sample of fluid from the "middle" floor drain labeled AEI-1-RB Sampled at 12:05 pm. These Samples will be analyzed for metals, pesticides, herbleides, ignitability, corrosivity and reactivity. In addition, testing will include nitrates and Phosphutes, and total organic helides (Tox),
Three soil samples or material samples were collected from the war around the outside city well. One sample was of a black material labeled AEI-2-RB, collected at 1:30 pm. One Sample was from on one pile labled AEI-Red pile. Finally, a black material, which was previously scraped from the tarmack was collected, labeled AEI-Black Air. All three Material Samples will be analyzed for the above constituents.
I hereby swear and affirm that a receipt for the property
was signed by me and left with Allon Elias Lug Z Paul - EPX Lug Z both Metalf & Eddy, Inc.

ADMINISTRATIVE WARRANT FOR - Page 8 -28 ENTRY AND INVESTIGATION

ATTACHMENT 2 GENERAL FACILITY INFORMATION

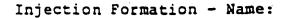
USEPA, REGION X

UNDERGROUND INJECTION CONTROL PROGRAM IN-DEPTH INSPECTION REPORT LOW TECH WELLS

GENERAL FACILITY INFORMATION

Inventory/Permit ID	Other ID No.
Operator/Facility: Name	AEI Corporation
Address: 1297 E.	
^	State: 1d zip: 83202 Phone:
Legal Contact: Name	
Company: AEI Corpor	tion
Address: 1297 F. (anty Road
city: Pocatello campy:	State: Zd zip: \$3207 Phone:
Owner: Name _	As Above
Company:	
Address:	
City: County: _	State: Zip: Phone:
•	
Parent Company:	
Ownership Status: 1 = FED (Circle One)	2 = STATE 3 = PRIVATE 4 = PUBLIC 5 = OTHER
Nature of Business:	ilizer and Horavy Metal Processing Plant
RCRA Facility? (Y/N/M) Y =	Yes N = NO M = MAYBE, PENDING ADDITIONAL INFORMATION
. 1	NSPECITION INFORMATION
Inspection Date: (M, D, CY): _	
Names and Affiliations of Insp <u>Ciair Paulicia</u> (EFA Re Buse, Idehel)	ectors: Russ Briker Metrolf & Eddy, Inc.) sion X), mike Gilviamon LEPA RURA DIVINIA
Signature(s) of Inspector(s):	
Signature(s) of Inspector(s): Date Inspection Report Complet	Ruse Bak

SECTION II - Hydrogeologic Information



- Description:
- Extent of Injection Zone (s) Below Land Surface (or elevation above Mean Sea Level):
- Minimum Distance from Injection Well to Underground Source of Drinking Water (U.S.D.W.):

Location (depth below land surface, areal extent, etc.) and description (thickness, lithology, etc.) of Any Relatively Impermeable Strata (aguitard (s)) Present:

Underground Sources of Drinking Water:

Confined:

Unconfined:

Depth to Perched Water Table (if present):

Depth to Water:

Saturated Thickness:

Description and Characteristics:

Extent of Use of U.S.D.W. (extensive, moderate, municipal, domestic, potential, etc.):

Comments:

Describe Injectate Source/Pre-treatment Processes: Sturm Ningff in trimack
area. Floor rinsequeter inside building
Injectate Composition: Fluids
Possible Contaminants: Arsenic, Zinc, Chalmian
Average Volume Injected: Not known (gallons/day/well)
Specify periodicity of injection volume and of injectate composition: Flaves are claused one every 3 months with water
Describe potential sampling points: Inside of Mildle floor dain
INSPECTION RESULTS AND RECOMMENDATIONS
General Comments (appearance of well(s), susceptibility to spills, security, etc.): Very poor housekeeping. Ample spillage of oils and fuels on floor new floor drains
Any Non-Compliance Noted? (Y/N) X Follow-Up Needed? (Y/N)
Recommended Follow Up Action: ENF
FLG=Plug Well RTN=Routine/Periodic Inspections SMP=Sampling ENF=Emergency Response/Enforcement RFT=Request for Additional Information

Inventory/Permit ID _____ Operator/Facility

SECTION III -- Operating Data

Injection Rate, Frequency, and Volume (drainage area, precipitation, etc. for drainage wells): Floor are viscal off with water every take months Description of Injection Operation (including brief history): Floor drains ove utilized to drain fluits which collect on thuility's flar Fluid Source: Fluid Composition/Characteristics (including any treatment process): Water Contaminant (s) and Potential Source (s) of Contamination: Cyanibe from Storye tanks and one and slay. From Municipality Process Method of Disposal (transport to well): Previous Problems with Well (clogging, overflowing, etc.): Description of Problem: Operating Records Attached: Yes _____ No _____ Injection Fluid Analyses Attached: $\sqrt{t^3}$ No

SECTION IV - SITE INSPECTION SPECIFICS

Name and Affiliation of Inspectors: Russ Baker (Metalf and Goldy, Jac)
Craig fluction (EPA Region x), Mike Silverman (LPA RURA Division, Buise, 1d)

Name and Affiliation of Facility Contact: Alan Elas located

Date:

Time:

Reason for Inspection: Inspection team was notified by the Shoshene-Bannak Tribe that the facility operates injection wells.

Number of Injection Wells:

Number of Injection Wells Inspected:

Site Conditions: Cently grading Great

Inspection Comments:

ATTACHMENT 3 FIELD NOTES

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Project UIC Inventory on Indian Landacci. NoP	age 🗕	(otS
Subject Comptd. By D	Date	7/1/91
Subject 2	Date	

0700 - Pickup rental car from Goleta Airport. 0730 - Arrive @ Mile to mobilize for Ideho. 1130- Leave for Los Angeles International Avgod 1450- Leave Los Angeles for Self Lake City, Otah. Note: I har time change 1748. Arrive in Sait Like City, Utch 1810-Leave for Pocatello, Id. 1920-Arrive in Pocatello, Id. (raig Paulsen and Mike Sullivan of EPA Region X and RCRA, Idaho Brand, respectively, are whiting at airport. 1940-Arrive @ Best Western, Lotton Tree Ina.

9 hrs Russ Baka

METCALF & EDDY, ENGINEERS

Project UIC Inventory on Indian l	-und! Acct. No.	Page _	2 01 5
Subject	Comptd. By		7/2/9/
Detail	Ck'd. By	Date	
0800 - Meet Im Hunt es	z, vonschult	tz	
Mr. Hunt of the U.S warrant to mr. Vol called Mr. Allias intent.	. marshill office 15 chiltz, Mr. L	Served the lonsofulte	
6815- Bein Mcconnesiance inspec	tion of the facilit	Y	
Y creel and CYA	Invite Comments of Control of Con	crete Asphalt Circle to Suster Sicility X-X-X-X-	・ラ・・メートーメースート
\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\			ž.

0830- Crais and Mike spoke to Mr. Allies over the phone to discuss what we were doing an the property and Mike spoke to him obsert hezerolous charle meniferty.

RJ.

E. county



Project	_ Acct. No	Page 3 of <u>5</u>
	Comptd. By	
Detail	_^Ck_d. By	_ Date
0900- RD leaves for harden Some Sempling eguipment	restore to pick up	clecin and
1018- Return to AET.		
1070 · Fogot PZP 1045 - Return to AEI, Calibrate 1104 - Decon Semple-	P 70	
#1 picture of indial c #2 clecon bomb sam #3 " " " " " " " " " " " " "	ten floor drain 27 inside cover	rey viase
1111: Fluid found in midd	le floor drain, we	will Sample.
# Fluis in well	rell 1125 } 1156	
1153-ASSEMBLE book Sample- 1205- Took 2 samp Fluid Sample #10 labeling sample conte	s from floor drawk kbeled sinoas	AEI-1-12B
#12 Sampling Flord from well #17 Sampling flord from well #14 Dry well #15 Dry Well w/respect to me #16 Sampling sediment #17 #18 decon sampling sh		·
1330- Took two soid Samples outside drain, labeled of a pile of red met two solid samples of AEI- Black Pile-Rs.	from "Black Houle" are AEI-Z-RB; tack to enal libeled AEI-Re	ر ۱۹ در ۱۳ م
HOZ- All samples are split, and give the other helf	we will take half of to Mr. Allias for hi	the samples on to analyze.
1405 - Decon sampling equipment,		C'site.
#19 Hole in Floor next to #20 Hole in floor next to #21 Bil Spilage on floor new	Happer Burner - Bellioc	

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Project			Acct. No		Page	01 5	
Subject			Comptd. B	Зу	Date		
Detail			Ck'd. By _	<u>,</u>	Date		
#:	23 Empty Empty	Cyanide Storage	e over	floor drain,	, weil side	C.	
#2	5 Cyanide	tenk over midd	re floor d	lain, collection	chaix.		
	End	of Roll#1		,		•	

Roll =2 I'd bld, well a materia 12 - material on belt entering blos ille 17 - west termes sit of water expossible 18 - material sloregy shad 12-21- werd side of blos 22 - dry well 23-25 - North from & County Rel to AEI

Project	Acct. No.	· .	Page _	45 01 5
Subject	 Comptd. By		Date	7/3/9/
Detail	Ck'd. By		Date	·

150 - Fill of the sample recipt for Alan Elias
in, Gias said they clear water floor wheater ance every 2 months, Draw his not been used
1530 - Secure and leave-s, the two years

1545- Armin at Bost Quality Inn to finelize data with Mike Silverman.

1600 - Lunch

1625 - Look for Dry Fees Fill out Chain of custody forms 1658 - Arrive at Federal Express and Send Samples to Las.

1730- Arnive back at Cottontree- Inn. Found out Travel agent did not reserve my flight for next day, must leave by 1540.

1830 - Check out of Cottontree Inn

1900 - Arrive at Pocatello Airport.

1940-Leave for Salt Lake City

2050- Arrive in Salt Cake

ATTACHMENT 4 LABORATORY REPORTS



NET Pacific, Inc., Burbank Division 700 South Flower Street, Burbank, C/

Tel: (213) 849-6595 Fax: (818) 954-0232 4715 B

Client: Ackalf & Elely Address: 916 State St	site	500	Cont	act pe	rson:	CUST 362-21	me!	Special Handling Request
Santa Bistara (a. 93/0) PO# (805) 962+2122 Project: AEZ S					Entern	□ Verbal □ Other		
Sample ID	Date	Time	Ġrab	Comp	No. of Containers	Waste Type	Preservation	Analysis request
AEZ-1-RB	7/2/91	1205	Χ		3		none	Tox
AEI-1- RB							Nitric Meil	TUP Extraction tor Can Michels
AEI-1-PB					1		4014	Nitrates, Phophates, Corrosinity, Machinix
AEI-1-CB					\			Flashpoint
AEI-1-RB	γ	, V	V		l		4	8270
· .								
Collected by: Received by:	raig Pac	16ca				Delivery by:		Date Time
Received by:	Dale	_ _	Time			Relinquishe	d by: RING	1 B. Dale 7/2/91 Time 1700
Received by:	Date	· ,	Time			P.siinquishe	d by:	Date Time
Received for laboratory by:	Date 7/	5/91	. Time <i>[O</i> .	: 43	ann	į ·	Precautions/h	alyses normal TAT For TOX - 5 day TAT
						-		for TOX - S day 1 Th



NET Pacific, Inc., Burbank Division 700 South Flower Street, Burbank, C.

Tel: (213) 849-6595 Fax: (818) 954-0232

4715A

Client: Metcalf & Eddy, Inc Address: 816 State St, suite 500 Santa Burboa, (a. 73)01				CHAIN OF CUSTODY Contact person: Dar Bena Phone # (805) 962-2127 PO # Project: AEI Enkaprises Sampling					Special Handling Request Rush Verbal Other		
Sample ID	Date	Time	Grab	Comp	No. of Containers	Waste Type	Preservation		Analysis requ		
ACI-Z-RB	7/2/9/	1330		×	1	Suil	None	Flushpoist, TCLP	EPA McHail \$27 Extraction (Commercy)	virtely, physphies, concenity, reacher	
AEZ-Red Pile					1))	berop /		1 no Tox	
AEI-Black Pila	\downarrow	V		+	(V	V	A	··	Tox	
		-									
Received by: Received by:	rais Pa	ulsan.				Delivery by	•		Date	Time	
Received by:	Date		Time			Relinquishe	d by: Bekn		Date 7/2/9/	Time / 700	
Received by:	Date 1	,	Time			Polinquishe			Date	Time	
Received for laboratory by: Final disposition:	Date 7/	13/94	Time /O	: 4	3gm	<u> </u>	(Precautions/h	• •	Side+ yani	de generation	



NATIONAL ENVIRONMENTAL TESTING, INC.

EPA Region 10
Faxed 11/7/97

NET Pacific, Inc. Burbank Division 700 South Flower Street Burbank, CA 91502

Tel: (213) 849-6595 Fax: (818) 954-0232

DOHS Certificate Number: 1192 LACSD Lab I.D. Number: 10158

07-19-91

Dave Bernal Metcalf & Eddy Services 816 State Street Ste. 500 Santa Barbara, CA 93117

Client Ref: AEI Enterprises

Sample analysis for the project referred to above has been completed and results are located on attached pages.

Should you have questions regarding procedures or results, please feel welcome to contact our Client Services Representatives or the Laboratory Director.

Danhy Wong Laboratory Operations Manager

DW:rm Attachments: Analytical Reports Chain of Custody Document

Client Net Acct No: 22.01

NET Job No: 4715B

Second Se



Client Name: Metcalf & Eddy Services

Client Ref.: AEI Enterprises

NET Job No .: 4715B Date Reported: 07-19-91 Date Received: 07-03-91 1043

28203-28206 Lab Series :

Matrix

Sample ID : AEI-1-RB

Lab No.

: 28206

Water

ANALYTES/METHOD		RESULTS	R.L.	UNITS
pH Flashpoint Sulfide Nitrate, as N Phosphorus, Total Cyanide, Total TCLP Extraction 17 CAM Metals, Tota	150.1 1010A 376.1 352.1 365.4 335.2	6.6 >200 ND 0.38 230 0.10 07-09-91	NA 1.0 0.03 0.02 0.02	pH units deg F mg/L mg/L mg/L mg/L
CAM Metals, Soluble	·			
Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Mercury Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc Tot. Org. Halides	200.7 206.3 200.7 200.7 213.1 200.7 219.1 220.1 239.1 245.1 200.7 249.1 270.3 272.1 200.7 289.1 9020	ND 0.026 ND 9.38 0.02 ND 0.75 0.08 0.0012 0.20 1.66 0.018 0.14 ND 0.78 5.30 0.09	0.05 0.003 0.05 0.02 0.01 0.05 0.02 0.05 0.05 0.05 0.03 0.01 0.02 0.04 0.5 0.02	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L



NET Pacific, Inc.

Client Name: Metcalf & Eddy Services

Client Ref.: AEI Enterprises

NET Job No.: 47158

Lab Series : 28203-28206

Date Reported: 07-19-91 Date Received: 07-03-91 1043

Matrix : Water

Sample ID : AEI-1-R8 Lab No. : 28206

ANALYTES/METHOD	RESULTS	R.L.	UNITS
METHOD 8270			
Date Extracted Date Analyzed Reporting Limit Multiplier GC/MS SEMI-VOL ORGANICS Acenaphthene Acenaphthylene Aldrin Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(k)fluoranthene Benzo(ghi)perylene Benzo(ghi)perylene Benzoic Acid Benzyl Alcohol Benzyl butyl phthalate delta-BHC gamma-BHC Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether Bis(2-chloroisopropyl)ether Bis(2-ethylhexyl)phthalate 4-Bromophenyl phenyl ether 4-Chloroaniline 2-Chlorophenylphenyl ether Chrysene 4,4'-DDT Dibenzofuran	07-91 07-16-91 2	552555555555555555555555555555555555555	09////////////////////////////////////
3,3'-Dichlorobenzidine Dieldrin Diethyl phthalate Dimethyl phthalate	ND ND ND ND	20 3 5 5	ug/L ug/L ug/L ug/L
a time city t piteria tace	110	3 .	~2/ ~

ND - Not Detected at the Reporting Limit



Client Name: Metcalf & Eddy Services

Client Ref.: AEI Enterprises

NET Job No.: 47158 Lab Series : 28203-28206 Date Reported: 07-19-91 Date Received: 07-03-91 1043

Matrix : Water

Sample ID : AEI-1-RB Lab No. : 28206

2.4-Dinitrotoluene 2.6-Dinitrotoluene ND 5 ug/L 2.6-Dinitrotoluene ND 5 ug/L Di-n-octylphthalate ND 5 ug/L Endrin Aldehyde ND 50 ug/L Fluoranthene ND 5 ug/L Fluorene ND Fluor	
Di-n-octylphthalate ND 5 ug/L Endrin Aldehyde ND 50 ug/L Fluoranthene ND 5 ug/L Fluorene ND 5 ug/L Heptachlor ND 2 ug/L Heptachlor epoxide ND 3 ug/L Hexachlorobenzene ND 5 ug/L Hexachlorobutadiene ND 5 ug/L Hexachlorocyclopentadiene ND 5 ug/L Hexachloroethane ND 5 ug/L Indeno(1,2,3-cd)pyrene ND 5 ug/L Isophorone ND 5 ug/L Isophorone ND 5 ug/L Naphthalene ND 5 ug/L Naphthalene ND 5 ug/L 2-Nitroaniline ND 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Endrin Aldehyde ND 50 ug/L Fluoranthene ND 5 ug/L Fluorene NO 5 ug/L Heptachlor NO 2 ug/L Heptachlor epoxide NO 3 ug/L Hexachlorobenzene ND 5 ug/L Hexachlorobutadiene ND 5 ug/L Hexachlorocyclopentadiene ND 5 ug/L Hexachloroethane ND 5 ug/L Indeno(1,2,3-cd)pyrene ND 5 ug/L Isophorone ND 5 ug/L Isophorone ND 5 ug/L 2-Methylnapthalene ND 5 ug/L Naphthalene ND 5 ug/L 2-Nitroaniline ND 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Fluoranthene ND 5 ug/L Fluorene NO 5 ug/L Heptachlor NO 2 ug/L Heptachlor epoxide NO 3 ug/L Hexachlorobenzene ND 5 ug/L Hexachlorobutadiene ND 5 ug/L Hexachlorocyclopentadiene ND 5 ug/L Hexachloroethane ND 5 ug/L Indeno(1,2,3-cd)pyrene ND 5 ug/L Isophorone ND 5 ug/L 2-Methylnapthalene ND 5 ug/L Naphthalene ND 5 ug/L 2-Nitroaniline ND 50 ug/L 3-Nitroaniline ND 50 ug/L	
Fluorene	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	4.0
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	•
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
Naphthalene ND 5 ug/L 2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
2-Nitroaniline NO 50 ug/L 3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
3-Nitroaniline ND 50 ug/L 4-Nitroaniline ND 50 ug/L	
4-Nitroaniline ND 50 ug/L	
Nitrobenzene NO 5 ug/L N-Nitrosodi-propylamine NO 5 ug/L	
N-Nitrosodi-propylamine NO 5 40/4	
at a consider to the first the mark	
N-nitrosophenylamine ND 5 ug/L	
Phenanthrene NO 5 ug/L	
Pyrene ND 5 ug/L	
1.2.4-Trichlorobenzene ND 5 ug/L	
4-Chloro-3-methylphenol ND 10 ug/L	
2-Chlorophenol ND 5 ug/L	
2.4-Dichlorophenol NO 5 ug/L	
2.4-Dimethylphenol NO 5 ug/L	
2,4-Dinitrophenol ND 25 ug/L	
2,Methy1-4,6-dinitrophenol NO 25 ug/L	
2-Nitrophenol ND 5 ug/L	
4-Nitrophenol NO 25 ug/L	
Pentachlorophenol ND 25 ug/L	
Phenoi ND 5 ug/L	
2.4.6-Trichlorophenol ND 5 ug/L	
2 Methylphenol NO 10 ug/L	
4 Methylphenol ND 10 ug/L	. ,
2.4,5-TrichTorophenol NO 10 ug/L SURROGATE SPIKE	
Nitrobenzene - d5 81 % Rec.	
2- Fluorobiphenyl 92 % Rec.	

ND - Not Detected at the Reporting Limit



Client Name: Metcalf & Eddy S Client Ref.: AEI Enterprises Metcalf & Eddy Services

47156 NET Job No.:

Lab Series :

28203-28206

Date Reported: 07-19-91 Date Received: 07-03-91 1043

Matrix

Water

Sample ID : AEI-1-RB Lab No. : 28206

ANALYTES/METHOD	RESULTS	R'_L	UNITS
p-Terphenyl-d14	70		% Rec.
Phenol - d6	86		% Rec.
2-Fluorophenol	76		% Rec.
2,4,6-Tribromophenol	82		% Rec.



NET Pacific, Inc.

Client Name: Metcalf & Eddy Services Client Ref.: AEI Enterprises

NET Job No.: 4715A

Lab Series : 28203-28206

Date Reported: 07-19-91 Date Received: 07-03-91 1043

Matrix

: Soil .

Sample ID :

AEI-2-R8

AEI-Red Pile

AEI-Black

Pile

Lab No.

28203

28204

28205

			<u> </u>			
ANALYTES/NETHOD			RESULTS		R.L	UNITS
Soil pH Reactive Sulfide Reactive Cyanide Flashpoint Nitrate, as N Phosphorus, Total TCLP Extraction CAM Metals, Soluble	9045 9030 9010 10108 352.1 365.4	4.3 ND ND >200 48 6.4 07-09-91	7.6 ND NB >200 200 430 07-09-91	4.4 ND >200 45 1.200 07-09-91	2.0 0.4 0.03 0.02	pH units mg/Kg mg/Kg deg f mg/Kg mg/Kg
Antimony Arsenic Barium Beryllium Cadmium Chromium Chromium Cobalt Copper Lead Mercury Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc Ext. Org. Halides	200.7 206.3 200.7 200.7 213.1 200.7 219.1 220.1 239.1 245.1 200.7 249.1 270.3 272.1 200.7 289.1 9020	ND 0.050 ND 0.67 0.11 0.29 1.19 ND ND 0.12 18.0 ND ND ND S.87 22.7 <2.5	ND 0.014 ND 0.09 ND 0.09 ND 9.25 ND 1.19 1.80 0.011 NO NO 12.4 1.66 NR	ND 0.038 NO NO 0.11 0.10 0.23 1.28 NO NO 0.21 13.6 NO NO NO NO NO NO NO NO NO NO NO	0.05 0.003 0.05 0.02 0.01 0.05 0.05 0.05 0.05 0.05 0.03 0.04 0.04 0.5	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L



NET Padfic, Inc.

Client Name: Metcalf & Eddy Services Client Ref.: AEI Enterprises

NET Job No.: 4715A Lab Series : 28203-28206

Date Reported: 07-19-91 Date Received: 07-03-91 1043

Matrix

: Soil

Sample ID :

AEI-2-RB

AEI-Red Pile

AEI-Black

Pile

Lab No.

28203

28204

28205

ANALYTES/HETHOO		RESULTS		R.L.	UNITS
METHOD 8270	••				
Date Extracted Date Analyzed Reporting Limit Multiplier GC/MS SEMI-VOL ORGANICS Acenaphthene Acenaphthene Acenaphthene Aldrin Anthracene Benzo(a)anthracene Benzo(b) fluoranthene Benzo(b) fluoranthene Benzo(a)pyrene Benzo(chi)perylene Benzo(chi)perylene Benzo(chi)perylene Benzol Acid Benzyl Alcohol Benzyl Alcohol Benzyl Alcohol Benzyl phthalate delta-BHC gamma-BHC Bis(2-chloroethyl)ether Bis(2-chloroethoxy)methane Bis(2chloroisopropyl)ether Bis(2-ethylhexyl)phthalate 4-Bromphenyl phenyl ether 4-Chloroaniline 2-Chloroaphthalene 4-Chlorophenylphenyl ether Chrysene 4,4'-DDC 4,4'-DDE 4,4'-DDT Dibenzofuran Dibenzo(a,h)anthracene	07-10-91 07-12-91 1.0 	97-12-91 07-12-91 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	07-10-91 17-07-10-91 17-07-10-91 17-07-10-91 17-07-91 17-	330 330 1600 330 330 330 330 330 1600 160	෪෪෪෪෪෮෧෮෧෪෧෫෧෫෧෪෪෪෪෪෧෦෧෦෦෦෦෦෦෦෦෦෦෦෦෦෦෦෦෦
Di-n-butyl phthalate 1,2-Dichlorobenzene 1.3-Dichlorobenzene	10 10 10 10	ND ND	ND ND	330 330 330	ug/Kg ug/Kg ug/Kg
1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ND ND	ND . ND	ир , ир	330 660	ug/K g ug/Kg

 $\ensuremath{\mathsf{ND}}$ - Not Detected at the Reporting Limit



Client Name: Metcalf & Eddy Services Client Ref.: AEI Enterprises

NET Job No.: 4715A Lab Series : 28203-28206

Date Reported: 07-19-91
Date Received: 07-03-91 1043

Matrix

: Soil

Sample ID:

AEI-2-RB

AEI-Red Pile

AEI-Black

Pile

Lab No.

28203

28204

28205

ANALYTES/METHOD	٠.	RESULTS		R.L.	UNITS
Dieldrin	NO	, NO	ND	1600	ug/Kg
Diethyl phthalate	MD	иĊ	NO	330	ug/Kg
Dimethyl phthalate	№	NÔ	ND ND	330	ug/Kg
2.4-Dinitrotoluene	ND	ND	ND	330	ug/Kg
2.6-Dinitrotoluene	· NO	ND	MD	330	ug/Kg
Di-m-octylphthalate	ND .	ND	· NO	330	ug/Kg
Endrin aldehyde	ND	ND	NO	1500	ug/Kg
Fluoranthere	ND	ND	NO	330	ug/Kg
Fluorene	ND	· ND	. ND	330	ug/Kg
Heptachlor	MD	ND	. ND	1600	ug/Kg
Heptachion epoxide	NO ·	NO	NO	1600	ug/Kg
Herach loroberzene	ND .	NO	ND	330	ug/Kg
Hexachlorobutadiene	ND ·	ND	ND	330	ug/Kg
Hexachlorocyclopentadiene	ND	CM	ND	330	ug/Kg
Hexachionoethane	NO	NO	ND	330	ug/Kg .
Indeno(1,2,3-cd)pyrene	1/0	NO	ND	330	ug/Kg
Isophorone	ND	ND .	ND	330	ug/Kg
2-Methylnapthalene	ND ·	ND	ND	33 0	ug/Kg
Naphthalene	NO	ND	MD	330	ug/Kg
2-Nitroaniline	ND	ND	MO	1600	ug/Kg
3-Nitroaniline	NO	NO	NO	1600	ug/Kg
4-Nitroaniline	NO	NO	ОN	1600	ug/Kg
Nitroberzene	ND	NO	Ю	.330	ug/Kg
N-mitrosodi-propylamine	ND	ND	ND:	330	ug/Kg
N-Witrosophenylamine	ND	NO	NO	330	ug/Kg
Phenanthrene	NO	ND	NO	330	ug/Kg
Pyrane	NO	NO	ND	330	ug/Kg
1,2,4-Trichlorobenzene	NO	ND	ND .	330	ug/Kg
4-Chiloro-3-methylphenol	ND	NO	ND	660	ug/Kg
2-Chlorophenol	NO	MD	ND	330	ug/Kg
2.4-Dichlorophenol	NĎ	Ň	ΝĎ	330	ug/Kg
2.4-Dimethylphenol	ΝĎ	QN	NO	330	ug/Kg
2,4-Dinitrophenol	NO	ON.	. ND	1600	ug/Kg
2,Methyl-4,6-dinitrophenol	NÕ	NO	NO	330	ug/kg
2-Nitrophenol	. NO	ND	ND	330	ug/Kg
4-Nitrophenol	ND	NO	GN	1600	ug/Kg
Pentachilorophenol	NO	NO	ND	1600	ug/Kg
Phenoi	ΝĎ	ND	ND	330	ug/Kg
2,4,6-TrichTorophenol	NO	,ND	NO .	330	ug/Kg
2 Methylphenol	ND	NO.	NO	330	ug/Kg
L. ~ ut ipiooni	1 440		.~		-3-1-0

ND - Not Detected at the Reporting Limit

page: 8



Client Name: Metcalf & Eddy Services Client Ref.: AEI Enterprises

NET Job No.: 4715A

Lab Series : 28203-28206

Date Reported: 07-19-91

Date Received: 07-03-91 1043

Matrix

: Soil

Sample ID :

AEI-2-RB

AEI-Red Pile

AEI-Black

Pile

282773

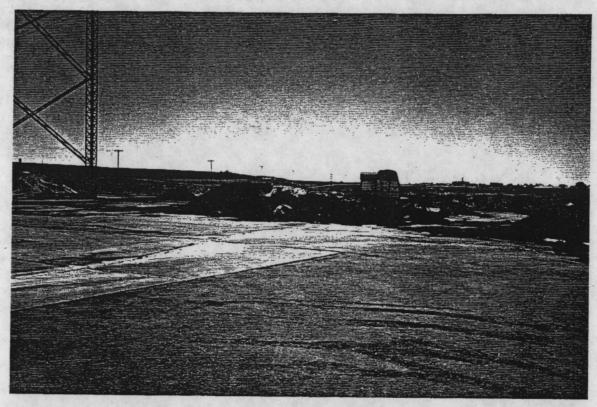
20205

CCD: I	.	دمدسع	20204	20200	•	
ANALYTES/METHOD	·	٠.	RESULTS		R-L-	CTIAN
4 Methylphenol 2,4,5-Trichloroph SURROGATE SPIKE	renol	KD NO	ND ND	N D N D	330 330	ug/Kg ug/Kg
Nitrobenzene - di 2- Fluorobiphenyl p-Terphenyl-d14 Phenol - d6 2-Fluorophenol 2,4,6-Tribronoph		39 62 87 47 38 77	64 82 92 67 58 81	69 84 94 70 58 77		% Rec. % Rec. % Rec. % Rec. % Rec.

ATTACHMENT 5 PHOTOGRAPHS



SUMP ON NORTHERN END OF PROPERTY



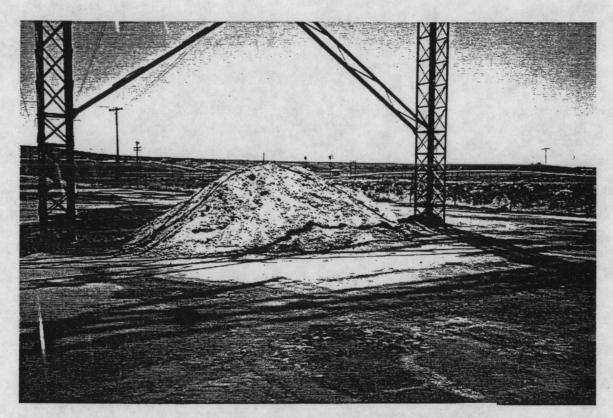
MATERIAL PILES ON WESTERN SIDE OF BUILDING NEAR 5D4 WELL



5D4 WELL WITH MATERIAL PILES IN BACKGROUND



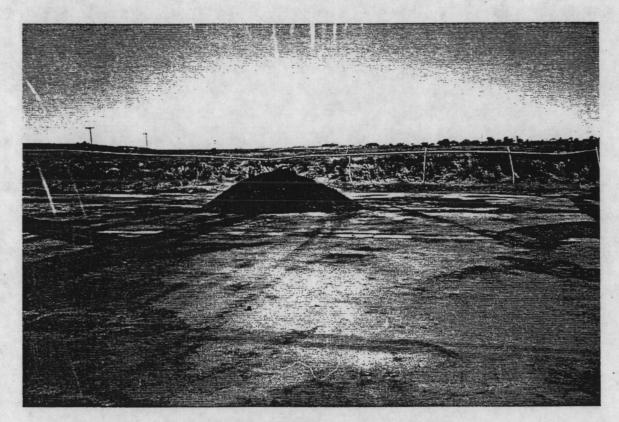
LOADING POINTS ON WESTERN SIDE OF BUILDING



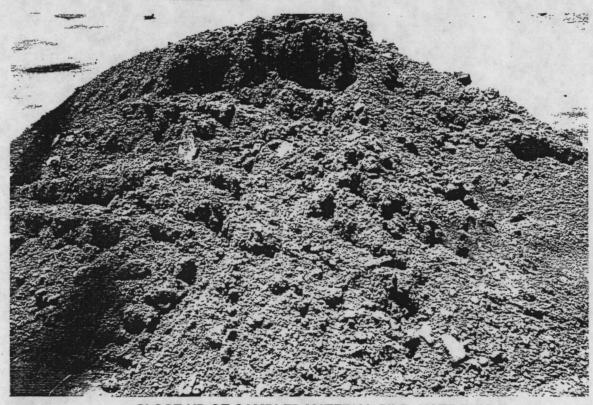
SULFUR PILE ON WESTERN TARMACK



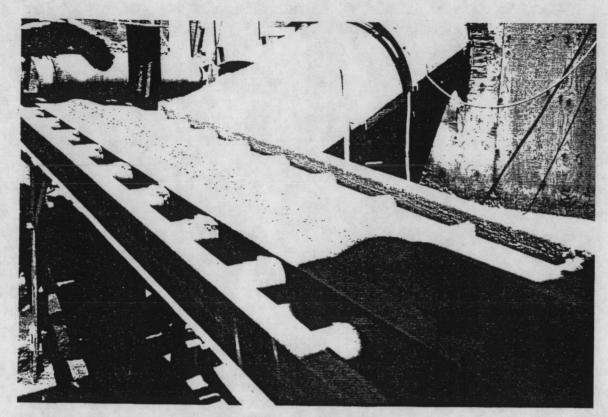
CLOSE-UP SHOT OF MATERIAL PILES ON WESTERN TARMACK



MATERIAL PILE FROM WHICH SAMPLES WERE TAKEN



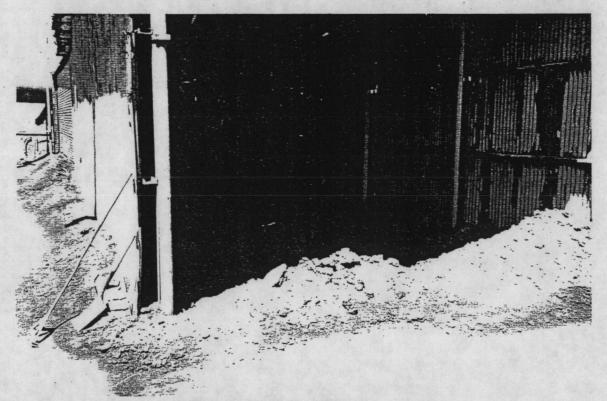
CLOSE UP OF SAMPLED MATERIAL PILE. NOTE THIS MATERIAL WAS COLLECTED FROM TARMACK AROUND 5D4 WELL



HOPPER ENTERING WESTERN SIDE OF BUILDING



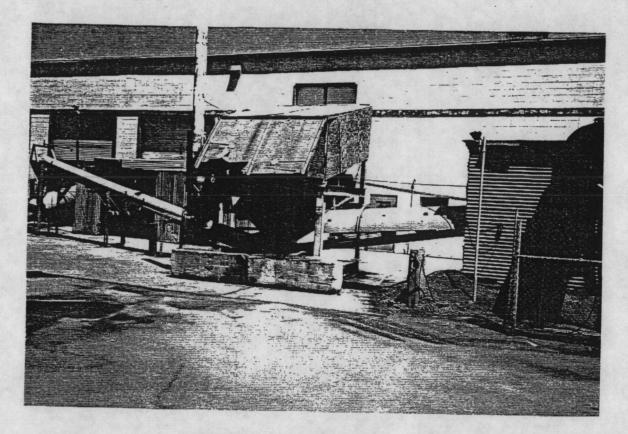
MATERIAL PILE WITH SPRINKLER IN CENTER OF PILE



MATERIAL STORAGE SHED ON SOUTHWESTERN PORTION OF BUILDING



WESTERN SIDE OF BUILDING



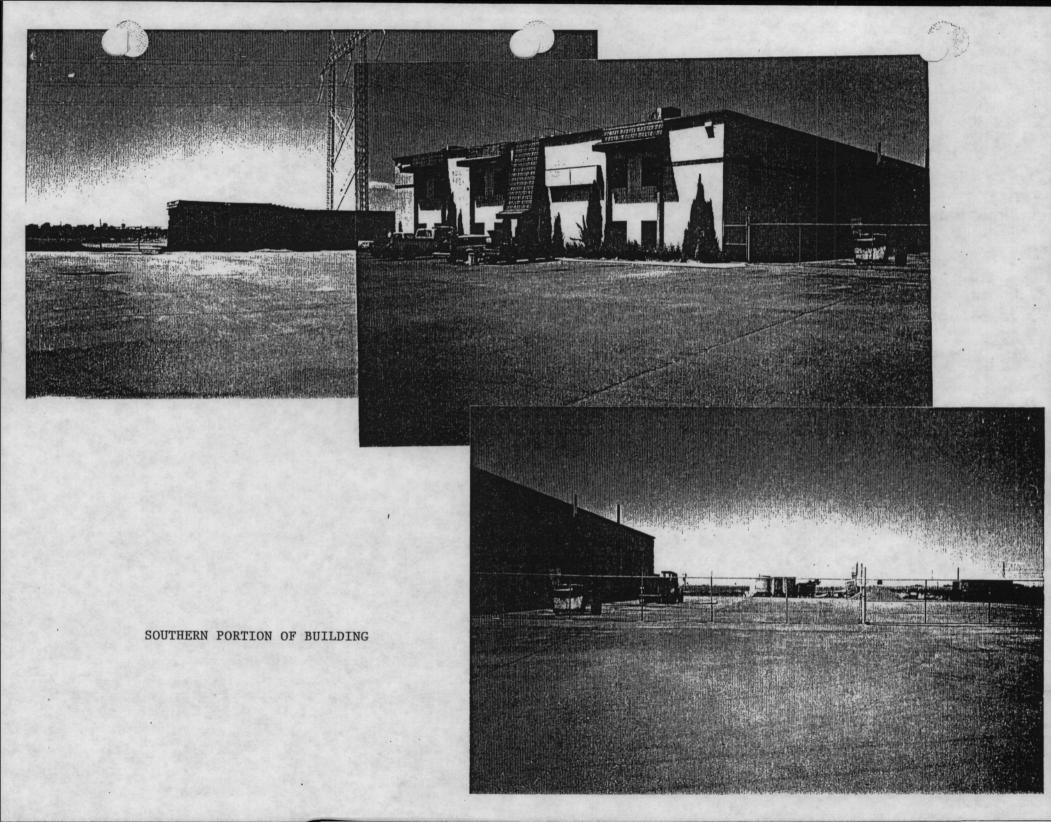
WESTERN SIDE OF BUILDING



ABOVE GROUND DIESEL STORAGE TANK ON SOUTHWESTERN SIDE OF BUILDING



5D4 WELL WITH SEDIMENT IN CLOSE PROXIMITY





DECONTAMINATION OF BOMB SAMPLER



DECONTAMINATION OF BOMB SAMPLER



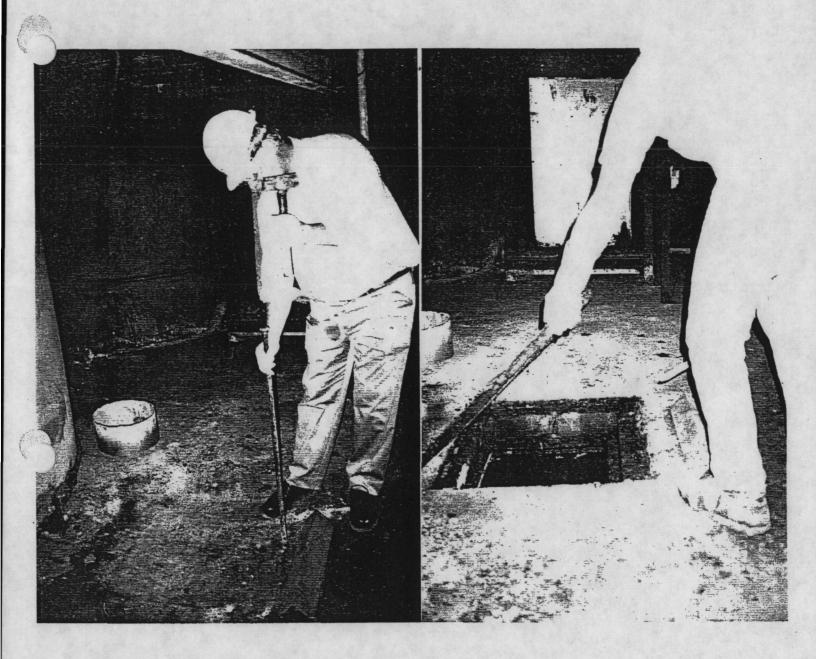
PID MEASUREMENT OF SAMPLING AREA



INITIAL DECONTAMINATION PROCEDURES

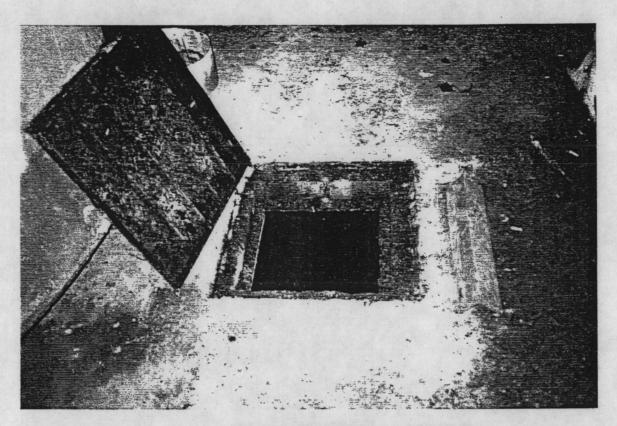


DECONTAMINATION OF BOMB SAMPLER



CRAIG PAULSEN PRYING OPEN SAMPLING AREA

RUSS BAKER OPENING SAMPLING AREA



FLUIDS IN CENTER FLOOR DRAIN



FLUIDS IN CENTER FLOOR DRAIN



RUSS BAKER LABELING SAMPLE CONTAINER



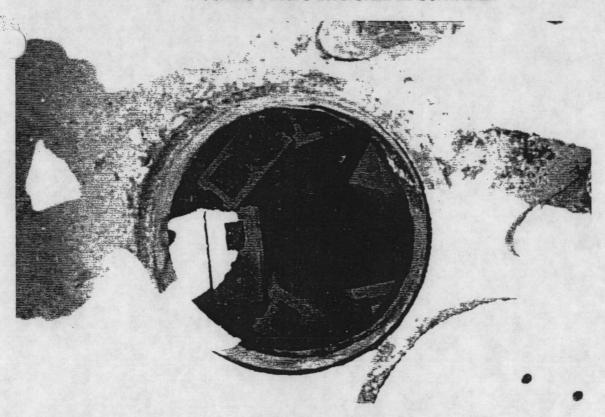
SAMPLING OF FLUIDS IN CENTER FLOOR DRAIN

POURING FLUIDS INTO SAMPLE CONTAINER





POURING FLUIDS INTO SAMPLE CONTAINER



5D4 WELL IN REAR OF BUILDING



5D4 WELL WITH RESPECT TO STOCKPILED ORE



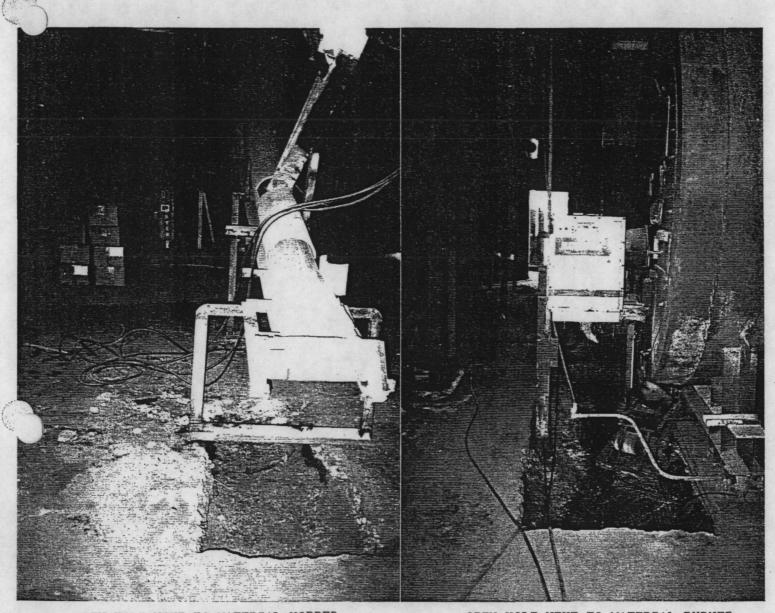
SAMPLING SEDIMENT NEXT TO 5D4 WELL



SAMPLING SEDIMENT NEXT TO 5D4 WELL

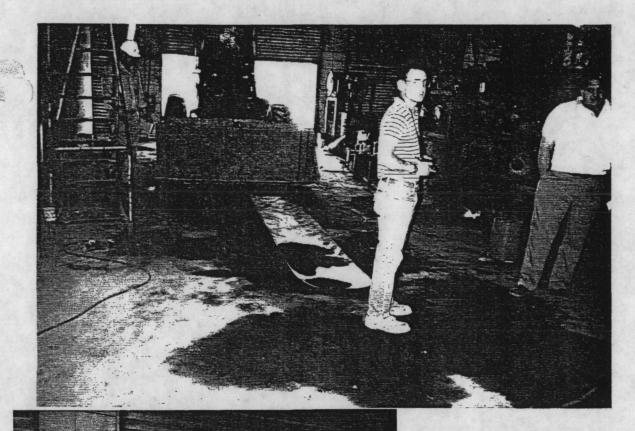


DECONTAMINATION OF SHOVEL USED FOR SAMPLING



OPEN HOLE NEXT TO MATERIAL HOPPER

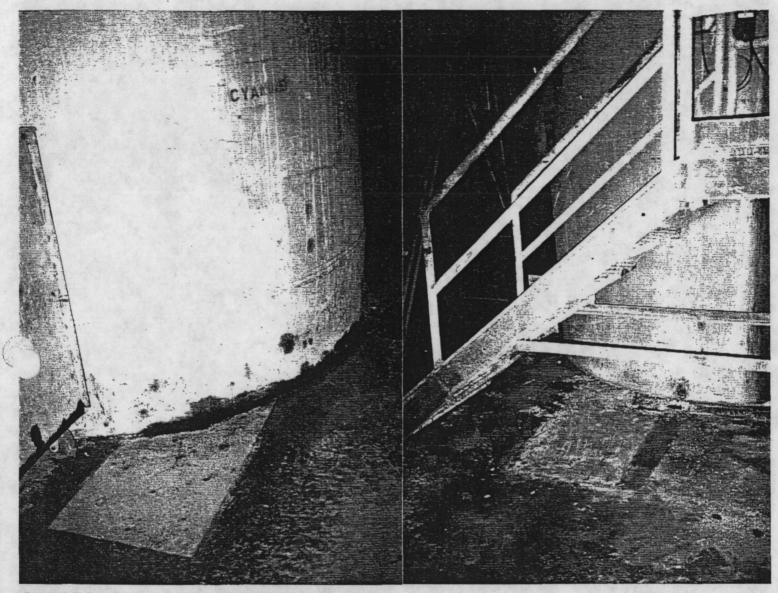
OPEN HOLE NEXT TO MATERIAL BURNER



OIL SPILLAGE ON FLOOR



OIL AND LUBRICATING FLUID SPILLAGE NEAR OIL AND LUBRICATING FLUID STORAGE AREA



CYANIDE TANK ON TOP OF NORTHERN FLOOR DRAIN. NOTE LEAKAGE NEAR FLOOR DRAIN

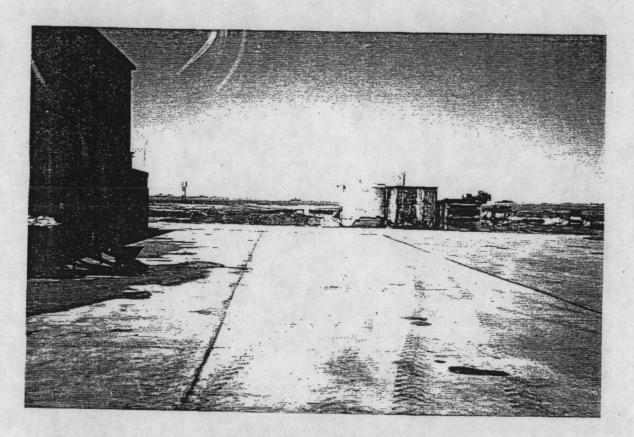
CYANIDE TANK ON TOP OF SOUTHERN FLOOR DRAIN



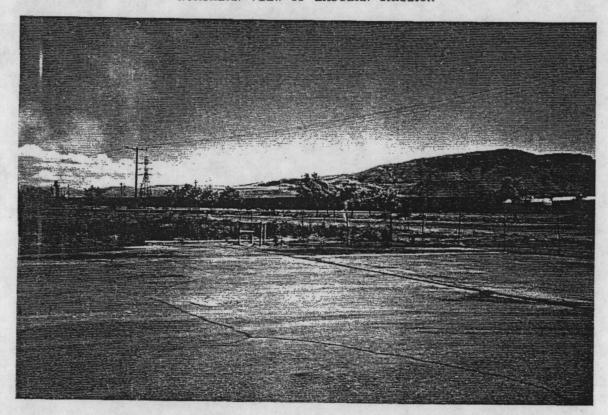
CYANIDE TANK NEAR SAMPLED FLOOR DRAIN



EASTERN TARMACK



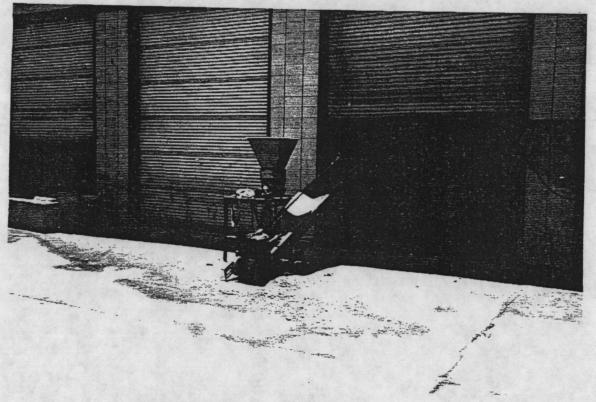
NORTHERN VIEW OF EASTERN TARMACK



SOUTHEASTERN CORNER OF EASTERN TARMACK WITH WATER WELL IN BACKGROUND



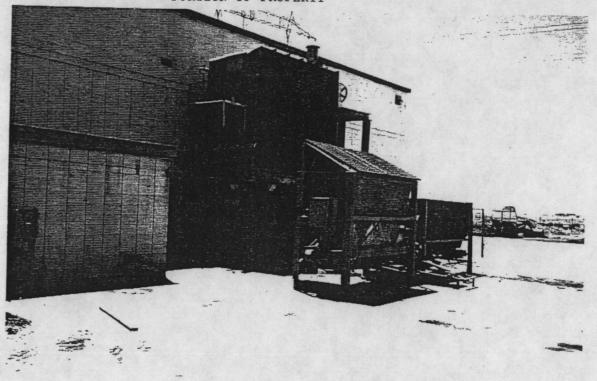
WESTERN VIEW OF EASTERN PART OF BUILDING WITH SERVICE BAY



WESTERN VIEW OF EAST SIDE OF BUILDING. NOTE MATERIAL HOPPER



NORTHEASTERN CORNER OF PROPERTY. NOTE MATERIAL STORAGE ON UNLINED PORTION OF PROPERTY



NORTHERN SIDE OF BUILDING

Regulatory Sources:

The Shoshone-Bannock Tribes, P.O. Box 306, Fort Hall, Idaho 83203, Tel: 208-238-3825, Fax: 208-237-0797.

IDEQ, 224 S. Arthur, Pocatello, Idaho 83204, Tel: 208-236-6160:

Gordon Brown, Superfund Project Officer Boyd Roberts, RCRA & Superfund Blaine Drews, Water Quality Jennie Light, Audrey Cole, Air Quality

Idaho Department of Water Resources, Eastern Idaho Office, 900 N. Skyline Drive, Idaho Falls, Idaho, 525-7161: Dennis Dunn, Water Right Agent

District 6 Health Department, Memorial Drive, Pocatello, Idaho 83201, Tel: 233-9080:

Mark Lowe, Solid Waste Coordinator

U.S. Environmental Protection Agency:
Ann Williamson, Project Officer, Seattle, WA, Tel: 206-553-2739.
Mike Silverman, Boise, Idaho, Tel: 208-334-1450
Bill Frutel, Boise, Idaho, Tel: 208-334-1475.
Craig Paulsen, Seattle, WA, Tel: 206-553-4350.